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ABSTRACT

This project paper reports the interobserver agreements and reliabilities for the observation procedures used in the Descriptive Study of Phase IV of the Individually Guided Education Evaluation Project. Only data from four observers--at the two Developing Mathematical Processes Schools and the two Wisconsin Design for Reading Skills Development Schools, grades 2 and 5--were used. Interobserver agreements and reliabilities were computed for each of three situations: training session, retraining session, and on-site visits. For each pair of observers and for each category, marginal agreements were computed. For the category sets--General Content, Pacing, Grouping, Materials, Learner Moves, and Interactions--Category Marginal Agreements and Cohen's Kappa were computed. Generalizability coefficients for estimates of reliability were computed for the training and retraining sessions for groups of three observers observing two or three classes for two days. The results indicated that there was high interobserver agreement at the three different check times on the categories of self-paced, other-paced, individual, large group, paper/pencil, engaged-written, engaged-covert, and non-engaged off task. The low interobserver agreements were explained mainly as a result of a low frequency of occurrence. The generalizability coefficients for total engagement and total non-engagement were acceptable. (Author/BS)

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Phase IV
Project Paper 79-25
Part 1 of 2 Parts

INTEROBSERVER AGREEMENT FOR THE OBSERVATION PROCEDURES FOR THE DMP AND WDRSD OBSERVERS DESCRIPTIVE STUDY

by Norman L. Webb

February 1980

Wisconsin Research
and Development Center
for Individualized Schooling

TM 840 804

Phase IV

Project Paper 79-25
Part 1 of 2 Parts

INTEROBSERVER AGREEMENT FOR THE OBSERVATION PROCEDURES FOR THE DMP AND WDRSD OBSERVERS

DESCRIPTIVE STUDY

by

Norman L. Webb

Report from the
IGE Evaluation Project

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Work Group Chairman

Wisconsin Research and Development Center
for Individualized Schooling
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Madison, Wisconsin

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Abstract

This project paper reports the interobserver agreements and reliabilities for the observation procedures used in the Descriptive Study of Phase IV of the IGE Evaluation Project. Only data from observers at the two DMP and two WDRSD schools are reported in this paper. The four observers attended a four day training session, January 10-13 1978, to learn how to use the observation procedures. On March 16 and 17 a retraining session was held at the middle of the fourteen week investigative period to check on the interobserver agreements. In addition, on-site visits were made to each school by one of the Phase IV staff where both the observer and staff member did one or two observations together. Interobserver agreement and reliabilities were computed for each of these three situations -- training session, retraining session, and on-site visits. For each pair of observers and for each category, marginal agreements were computed. For the sets of categories--General Content, Pacing, Grouping, Materials, Learner Moves and Interactions -- Category Marginal Agreements and Cohen's Kappa were computed. Generalizability coefficients for estimates of reliability were computed for the training and retraining sessions for groups of three observers observing two or three classes for two days. The results indicated that there was high interobserver agreement at the three different check times on the categories of self-paced, other-paced, individual, large group, paper/pencil, engaged-written, engaged-covert, and non-engaged off task. The low interobserver agreements

were explained mainly as a result of a low frequency of occurrence. The generalizability coefficients for total engagement and total non-engagement were acceptable.

Introduction

As a comprehensive system of education, Individually Guided Education (IGE) has as a goal the development of self-direction and motivation for learning in students, as well as the instruction of students at different levels of achievement. To examine IGE as an operating system, a five-phase plan was developed (Romberg, 1976). In Phase I, the extent to which key features of IGE had been implemented was assessed for a large sample of schools and related to both pupil and staff outcomes. In Phase II, more complete implementation data were collected from a sample of thirty schools to both verify and extend the Phase I data. Phase III was designed to examine the social meanings of schooling as interpreted within IGE schools on a day-to-day basis. Phase IV investigated the use of the Center's three curriculum programs in IGE and non-IGE situations. Finally, Phase V will provide a discussion of the implications of the overall project to significant contemporary issues about the conception and study of schooling.

Phase IV was a two-part study: the Descriptive Study and the Comparative Study. The purpose of the Descriptive Study was to describe the use of the Wisconsin Design for Reading Skills Development (WDRSD), (Otto, 1977); Developing Mathematical Processes (DMP), (Romberg, 1977); and Prereading Skills (PRS), (Venezky & Pittelman, 1977). Two schools using WDRSD, two schools using DMP, and three schools using PRS participated in the Descriptive Study from January to May, 1978. The purpose of the Comparative Study was to compare the use of WDRSD and DMP in IGE and non-IGE situations and to contrast these programs with alternative programs being used in IGE istuations. Math classes at eight schools and reading classes at eleven schools participated in the study from October 1978 until May 1979. A more detailed description of the design of Phase IV and the curriculum programs is given in Webb and Romberg (1979).

As in the other phases of the IGE Evaluation Project, only students at grade levels 2 and 5, or the IGE equivalent, participated in the math and reading skills portion of the study. The two schools that were selected to be in the reading skills portion of the Descriptive Study were both IGE schools using WDRSD at these grade levels. Both schools initially implemented the WDRSD at these grade levels. Both schools initially implemented the WDRSD program in 1971. While the Word Attack, Study Skills, and Comprehension elements were taught at both grade levels at School 452, only Word Attack was used at Grade 2, and Study Skills was used at Grade 5 at School 504.

The two DMP schools that were selected to be in the Descriptive Study were both IGE schools using DMP at these grade levels. Each school had been using DMP at the primary level for at least two years. The grade 5 DMP materials had only been available for approximately a year prior to the study. These schools then had only been using DMP at grade level 5 for one year.

The three main variables investigated in Phase IV were pupil outcomes, opportunity to learn, and means of instruction. Pupil outcomes were measured in two ways, using achievement monitoring and domain referencing tests. The development of these tests is described in Webb (1979a) and Dunham, Nerenz, and Webb (1979). Information on the other two variables was collected using observations (Webb & Nerenz, 1979a) and teacher logs (Webb & Nerenz, 1979b).

The data collection phase of the Descriptive Study lasted seventeen weeks, beginning January 16 and ending May 19, 1978. This time was divided into two periods of seven weeks, period one, January 23 to March 10, and period two, March 27 to May 12. Tests were administered during the weeks of January 16, March 13, and May 15. This project paper discusses the interobserver agreements of the two DMP and two WDRSD observers in using the observation system for the training and retraining sessions and the on-site visits.

I

Observations

In order to obtain information about the means of instruction and use of time during instruction in mathematics and reading skills in Grade 2 and Grade 5 classrooms or units using the DMP and WDRSD curriculum programs, observations were conducted approximately every week during the seventeen-week investigative period. The procedures used in conducting these observations are reported in detail in Project Paper 79-32 (Webb, 1979 b) and summarized briefly below.

Within each classroom or unit, six target students who were either randomly selected from the entire class or from a stratified sample within the units were observed using a time sampling procedure. The activity that a target student was participating in was observed for an instant and recorded as an event on the observation form, requiring approximately thirty seconds. This was followed by another thirty-second period for the observation and recording of the next student's activity. Each target student was thus observed in sequence. Then general comments were recorded concerning the whole class and requiring another thirty seconds. This cycle was repeated from the designated beginning of the reading skills or mathematics period until the end of that instructional period. The set of categories used to record information included:

General Content -	Time not spent on the content area of the subject matter of the instruction.
Specific Content -	Indication of the objective or skill of the student's activity.
Pacing -	Whether the student or another individual controls the pace of instruction.
Grouping -	The size of the group of which the student is a part.
Materials -	The materials used in the activity.
Learner Moves -	The student's engagement or non-engagement in the activity.
Interactions -	Verbal interactions involving the student during the activity.

The total amount of time spent by the six target students in each of these categories during the observation period was summed, providing an estimate of the allocated and available time. These observation categories, procedures, and means of analysis are similar to those used in the Beginning Teacher Evaluation Study (Marliave, et al., 1977).

II

Observers and Observer Training

All of the observers were from the area in which the school was located and had had some previous elementary teaching experience. Most had served as teachers, substitute teachers, or aides in the school where the observations were to be conducted. A more detailed description of each observer is given in Project Paper 79-42 (Webb & Romberg, 1979).

A description of the training and re-training sessions is given in Project Paper 79-33 (Webb & Nerenz, 1979c). Briefly, the DMP and WDRSD training session lasted for four days. The first day was spent providing the observers with an introduction to the system and a review of the curriculum materials. The next three days were spent doing observations in groups of three, one expert and two observers, in actual classrooms. On each of these days, three classes were observed--one fifth-grade DMP class, one second-grade DMP class, and one second-grade WDRSD class. During these sessions, the two observers at the DMP schools were always grouped together, as were the two observers at the WDRSD schools. The expert observers did observations with both pairs of observers at least once so that each pair had some experience with each expert. The training session was designed to familiarize the observers with the system, provide them with observation experiences, and measure interobserver agreement.

Whenever two or more observers observed together, certain procedures were followed. One clock was designated as the indicator of the time intervals. If a wall clock with a second hand was not visible to all of the observers, one of the observers acted as time keeper and provided a signal when the next target student was to be observed. A period of thirty seconds was allowed to observe each target student within one cycle, with each cycle lasting 3-1/2 minutes. Communication between the observers was kept to a minimum and was used mainly to designate the beginning of another cycle. Observations were conducted for the total class period, after which the observers reviewed the coding of each event and checked on their agreement. Discrepancies were discussed at this time.

From the training session, several sources of error were considered. The definition of a category may be ambiguous, making it difficult to distinguish among behaviors that fit the category. In addition, student activities may be ambiguous, allowing for more than one interpretation of the activity. How the student is engaged can frequently be interpreted in more than one way, with very little difference in certain situations between non-engagement in an interim activity and covert engaged behavior. Such difficulty in classifying student activities is also increased due to the fact that student activities are constantly changing. Thus, variations in the instant during which the two observers view the target child represent another source of error which will influence the level of inter-observer agreement. This problem results in observer error when observations are compared event by event, but should be minimized when class marginal totals across students and events are tabulated.

The training of the observers was designed to reduce as many of these errors as possible. The categories were defined with examples in the observer's manual. Ambiguous situations were discussed and clarified. By the end of the training session, it was expected that each observer would have marginal agreement with an expert on each category of .90 or above. The generalizability coefficients were used to indicate the degree of consistency among the raters without reference to particular level of agreement.

One problem in conducting observations over a period of time is the vigilance of the observers in performing the observations at the same level of competency at the end as at the beginning of the investigative period. To minimize this problem, all of the DMP and WDRSD observers attended a retraining session between the two halves of the investigative period. This two-day session was spent doing observations in groups of three, similar to the training session, to check on interobserver agreement. This same procedure of conducting observations with two or more observers was followed for this retaining session, and observer pairs and experts observed the same classes at the same schools for which training data were collected. In addition, on-site visits were made by Phase IV staff members to each school at least once during each period. This was a check of the observer's application of the coding system within the actual setting where data was being collected. The visit also was used to determine whether the observers were maintaining or improving the level of intercoder agreement which was reached at the training session.

All of the observations during the training and retraining sessions for DMP and WDRSD observers were conducted in actual classrooms under conditions which would be very similar to those which each observer would experience in obtaining the data. Actual classrooms were used in the training for several reasons. First, the observation system and

and procedures were complex enough that the activity of the target student could only be interpreted and coded in terms of the previous activities and behaviors, as well as the relationship with the teacher and the other students. To use video tapes in the training sessions would require a high quality of video taping using a split screen focusing on both the target student and the larger classroom setting, including the teacher and other students. This would have required substantially more preparatory time and equipment than was available.

A second reason for using the actual classroom was that the ratio of trainers to trainees was small, 1 to 2. This provided an adequate amount of time for the trainer to discuss in detail with the observers any discrepancies in the coding of classroom events following each observation. The discussions included information about the teacher, the target student, other students, and the materials, all of which were to be taken into account in coding the activities of the target children.

One disadvantage of conducting the training in actual classrooms, however, is that the observers may not be exposed to all possible situations. In an attempt to minimize this restriction in the training experiences, for the observers for DMP and WDRSD, sessions were observed in three different types of classes: one Grade 5 DMP class, one Grade 2 WDRSD class, and one Grade 5 WDRSD class. This exposed the observers to a number of situations. In addition, after the observers returned to their schools, one of the trainers visited each of them and did an on-site observation, discussing the coding of any specific situations which had not occurred during the training session but which the observer had subsequently experienced.

Another difficulty in using actual classroom settings for the training of observers is the difficulty in separating unwanted observer errors in the coding of unambiguous examples from expected observer disagreements on ambiguous events. A detailed discussion followed each observation among the two observers and the trainer. This time was used to identify observer disagreements and to determine the reason for such conflicts. Disagreements due to ambiguous events were noted to be considered in revising the definition of the categories for the comparative study. It was not necessary to have exact agreement on each event since the observation data was processed by summing across the events for the total class period. This lessened the need for agreement on each event as long as the marginal agreements were reasonable.

Using actual classrooms during the training sessions, then, was selected as the most reasonable means of training the observers because of the small number of observers to be trained, the time available to prepare quality video-tapes, or instructional materials, and the ability to discuss each observation in detail after the observation. Also, varied types of sessions were observed and observations were analyzed to provide information about the class, meaning that frequencies were computed across events and students and allowing for some disagreement between observers on specific events.

III

Interobserver Agreement and Reliability of Observations

In obtaining information about the means of instruction and use of time, the observers must have a thorough knowledge of the observation system in order to interpret students' classroom activities and record these activities using the appropriate categories. Secondly, in order to have reliable data, the observers must be able to use the observation system consistently across observation days. Thus, measures of interobserver agreement and consistency over time were needed.

Knowledge of the Observation System

The assessment of the observers' knowledge of the categories and procedures in the observation system was obtained by comparing the results of their observations by category for actual classroom sessions with those of an expert observer--one of the two Phase IV staff members who developed the observation system. The coding by the expert observer was used as the criteria for the observers to match. The level of agreement among the two expert observers was checked prior to the observer training session. This procedure of measuring the observers' knowledge of the system worked adequately for categories which were frequently observed such as pacing categories, individual or large groups, paper and pencil materials, and learner moves. For the categories that occurred infrequently, the knowledge of the observers was not tested during the training session when they occurred. These categories were given more emphasis during the on-site visits.

Reliabilites across Situations

Each DMP and WDRSD observer was to do observations at both Grades 2 and 5 from twelve to sixteen times over fourteen of the seventeen weeks composing the investigative period. In each case, the observer usually observed the same group of students using the same curriculum materials at approximately the same time of day. The only exception was at one of the WDRSD schools where students were regrouped approximately every two weeks and thus the target students were not always in the same instructional group. At this school, the observations were made on the instructional group containing the largest number of target students, with additional children observed so that the total number of students that were observed during each session was six.

Each observer then did observations on different days and at both grades two and five. In order to get an estimate of the reliability of observers across situations a generalizability coefficient (Cronbach, Gleser, Nanda, and Rajaratnam, 1972) was computed. Variance due to day was treated as a fixed effect in that some variance on each category was expected within a class from day to day. The variance components were computed using BMD: Biomedical Computer Programs (Dixon, 1971). For computing the generalizability coefficients for the WDRSD and DMP training session, data were used from the observations of two groups of two observers and one expert for three classes, one on Thursday and two on Friday. This provided, for each category, an estimate of generalizability for each set of observers and indicates the consistency among the observers across different classes.

IV

Analysis and Results

Interobserver Agreement

Marginal agreement (Frick and Semmel, 1978) was used as the single measure of interobserver agreement in comparing each observer with the expert for specific aspects of each observation category. This agreement is a simple percentage, relating the total frequency of a category across all the events for all of the target students for the two individuals. This measure of agreement was chosen since the unit of analysis is the class or I & R unit and the major analyses will use marginal totals. Marginal agreement was calculated for each category that had a sufficient number of observed events to make the measure meaningful. Calculations were generally not done for the general content categories, some of the materials categories, and some of the interactions because of low frequencies during the observed sessions.

Two measures of interobserver agreement were used in determining the accuracy of the observers compared with the expert for the set of categories, such as pacing, grouping, and learner moves. The overall marginal agreement is the mean of the individual marginal category agreements for all of the sub-categories in the set.

In addition, Cohen's kappa (κ) was computed. This coefficient takes into consideration chance agreement and is based on observed marginal distributions (Frick and Semmel, 1978). Cohen's κ coefficient was selected from among the other coefficients since it does not require that the marginals be symmetrical and proportional to known populational marginals. Cohen's κ can also be tested for the significance of the difference between two independent κ's and for the null nypothesis. However, the knowledge that κ is beyond chance is of little value, since, as an agreement coefficient, the desired value is much greater than 0. The value of κ indicates the proportion of events observed that are in agreement, with chance agreement excluded. One assumption for the use of κ is that the number of events is large--greater than or equal to 100--in order to assure that the proportion of events for which agreement is expected by chance remains nearly constant. Cohen's κ and the overall marginal agreement were used to determine the accuracy of the observers during the training session, the retraining session, and the on-site visits.

Two other measures of interobserver agreement were calculated and are included on the tables in the appendices but are not used in the analysis. These measures were calculated to be compared with the marginal agreement and to judge their appropriateness in measuring the agreement between observers for the data collected. One measure is the nominal agreement which compares two observers on individual events. This is a stronger criterion than marginal agreement and was not used in the analyses since only marginal scores were used from the observations. Nominal agreement does give an indication of the agreement between two observers in recording an instant of an activity rather than describing the total events over the activity.

The second measure included is Light's extension of κ (Frick and Semmel, 1978). This coefficient is algebraically equivalent to Cohen's κ, but is more versatile than the latter. Using the Light's extension of κ it is possible to provide for one category a measure of the conditional agreement with two observers which compares the agreement of one observer's score with a criterion score--the expert's score. The consideration of chance agreement is included in this coefficient. This coefficient was calculated to explore what additional information it can provide beyond the marginal agreement and Cohen's κ for the set of categories.

Generalizability of Observations

The data from the training and retraining sessions for the DMP and WDRSD observers were used to perform small generalizability studies and to calculate generalizability coefficients (ρ_c^2) on some of the observation categories--pace, group, learner moves, and paper and pencil materials. During the training session two groups of three observers each observed three classes. The generalizability coefficients calculated from this data provide some measure of the ability of the observers to discriminate among classes. A high coefficient indicates that a large amount of the variance can be accounted for by differences among classes and that the variance due to the differences among observers is relatively small. A low coefficient is due to large differences among the raters relative to the variance among classes. A zero coefficient indicates there is no variance among the classes.

In the retraining session for the DMP and WDRSD observers a cross design was used for two sets of observers. One set was composed of DMP observer 40 and expert observer 80. The other set consisted of the two WDRSD observers, 10 and 20, and expert observer 90. DMP observer 30 was only able to attend the last day of the retraining. Each set of observers observed the same three classes on two consecutive days resulting for the first set a 2 x 3 x 2 (observer x class x day) design and for the second set a 3 x 3 x 2 (observer x class x day) design. The BMD: Biomedical Computer Program 08V (Dixon, 1971) was used in calculating the variance components. Day was used as a fixed effect. The generalizability coefficient was computed using the equation:

$$\rho^2_c = \frac{\sigma^2_c}{\sigma^2_c + \sigma^2_{rc}}$$

where σ^2_c = variance component for class

σ^2_{rc} = variance component for the interaction between teacher and class

Generalizability coefficients for the retraining session were computed for the same observation categories as for the training session. A large coefficient for the retraining session denotes that the class was the primary source of variance relative to the variance due to interactions among the class and the two variables rater and day. A low or zero coefficient can be interpreted similar to the interpretation of the coefficients for the training session. The coefficient should be higher for the retraining session since the observers are more experienced.

V

Interpretations

Training Session

Observer Agreement. The summary of the observer agreement coefficients by sets of categories for the DMP and WDRSD training sessions are given in Table 1 through Table 9. Listed in the tables for each observer-expert pair and for each category is the marginal agreement. The overall marginal agreement and Cohen's kappa (κ) are given for the category set for each observer-expert pair. The contingency tables showing the frequencies for each category in each set for the training session are included in Appendix A. These tables can be consulted in order to determine the extent that the category was observed and the actual frequency of disagreement between the expert and observer.

The agreement coefficients for the pace categories are given in Table 1. The range of marginal agreements for self-paced is generally from .86 to 1.00. During one Grade 2 class using WDRSD, the expert coded six instances of self-pace which neither of the two observers noted. This resulted in a marginal agreement of zero, but is of little significance because of the low frequency of occurrence in this case and the consistently high agreements on the other occasions. The marginal agreements for other-paced generally ranges from .68 to 1.00. Two occasions with low agreement, observer pairs 30-80 and 40-90 on Friday, can be accounted for by a relatively low number of positive occurrences for other-paced coded during the class. The marginal agreements for not coding either of the pace categories vary greatly with low agreements

TABLE 1

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Training Session: January 12 and 13, 1978

Pace Categories

Observer Pair		Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa (κ)
Obs[a]	Expert			Self-Paced	Other-Paced	No Pace		
				Thursday, January 12, 1978				
10	90	WDRSD 2	54	.86 (30)[b]	.79 (24)	–[c] (0)	.82	.81
20	90	WDRSD 2	54	.94 (30)	.79 (24)	– (0)	.86	.64
30	80	WDRSD 2	60	1.00 (34)	.83 (15)	.73 (1)	.85	.86
40	80	WDRSD 2	60	1.00 (34)	.88 (15)	.82 (1)	.90	.88
10	80	DMP 2	84	.94 (34)	.94 (31)	1.00 (19)	.96	.76
20	80	DMP 2	84	.90 (34)	.87 (31)	1.00 (19)	.92	.78
30	90	DMP 2	78	.86 (48)	.68 (22)	.88 (8)	.80	.61
40	90	DMP 2	78	.78 (48)	1.00 (22)	.88 (8)	.95	.78
Mean				.94	.85	.88	.88	.76
				Friday, January 13, 1978				
10	90	DMP 5	30	.93 (27)	– (0)	.60 (3)	.76	.71
20	90	DMP 5	30	.96 (27)	– (0)	.67 (3)	.82	.78
30	80	DMP 5	30	1.00 (11)	1.00 (12)	1.00 (7)	1.00	1.00
40	80	DMP 5	30	1.00 (11)	.92 (12)	.86 (7)	.93	.95
10	90	WDRSD 2	54	.00 (6)	.92 (47)	.33 (1)	.42	.27
20	90	WDRSD 2	54	.00 (6)	.92 (47)	.33 (1)	.42	.06
30	80	WDRSD 2	54	.89 (47)	.40 (2)	.71 (5)	.67	.40
40	80	WDRSD 2	54	1.00 (47)	1.00 (2)	1.00 (5)	1.00	1.00
10	80	DMP 2	78	.97 (32)	.95 (41)	.62 (5)	.85	.82
20	80	DMP 2	78	1.00 (32)	.98 (41)	.80 (5)	.92	.88
30	90	DMP 2	84	.98 (65)	.82 (11)	.73 (8)	.84	.41
40	90	DMP 2	84	.92 (65)	.36 (11)	.89 (8)	.72	.60
Mean				.80	.83	.71	.78	.66

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Events coded by the expert.

[c] – No events were coded for this category by either the observer or expert.

explained by low frequency of occurrences.

The overall marginal agreement for pacing, the average of the three category marginals, ranges from .42 to 1.00. The low overall marginals correspond to occasions where one of the categories had a low frequency. Except for four of the occasions, the Cohen's κ coefficients range from .60 to 1.00. The four occasions with low κ's all occurred on Friday and three while observing a Grade 2 class using WDRSD. Again part of the reason for these coefficients is the disagreement between observers on a category which was observed infrequently by the expert. Overall, the observers had high agreement on the pacing categories. One observer, 30, had a few more problems with the coding of pacing than did the other. Also, there appears to be more difficulty with one class of Grade 2 WDRSD. The class differences will be studied in more detail in the generalizability study for the retraining sessions.

The coefficients for the grouping categories are given in Table 2. Most of the student available time was coded as being spent in individual work or in large groups. These two categories correspond closely to self-paced and other-paced, respectively. The marginal agreements for individual grouping are generally high ranging from .64 to 1.00. The range for large groups is also high, ranging in general from .67 to 1.00. Those coefficients below this range occurred where a very low frequency of the category was observed. The agreements in observing pairs and small groups are less stable than for the other two groupings. One reason for this is the low frequency of occurrence of these groupings. However, even considering this fact it appears that the observers had more difficulty

TABLE 2

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Training Session: January 12 and 13, 1978

Grouping Categories

Observer Pair		Curriculum and Grade	Total Events Observed	Category Marginal					Overall Marginal	Cohen's Kappa (κ)
Obs[a]	Expert			Ind.	Pair	SmGR	LgGR	Other		
				Thursday, January 12, 1978						
10	90	WDRSD 2	54	.64(20)[b]	.40 (5)	.62(13)	.81(16)	-[c](0)	.62	.64
20	90	WDRSD 2	54	.74(20)	.40 (5)	.77(13)	.75(16)	- (0)	.66	.68
30	80	WDRSD 2	60	.94(31)	.60 (3)	- (0)	.83(15)	.73 (11)	.77	.82
40	80	WDRSD 2	60	.90(31)	.50 (3)	- (0)	.88(15)	.82 (11)	.78	.82
10	80	DMP 2	84	.96(26)	.67 (9)	1.00(11)	.83(19)	1.00 (19)	.89	.80
20	80	DMP 2	84	.92(26)	.78 (9)	.79(11)	.95(19)	1.00 (19)	.89	.83
30	90	DMP 2	78	.74(38)	.75 (8)	.43(14)	.80(10)	.88 (8)	.72	.58
40	90	DMP 2	78	.86(38)	1.00 (8)	.57(14)	.91(10)	.88 (8)	.84	.77
Mean				.84	.64	.70	.84	.88	.77	.74
				Friday, January 13, 1978						
10	90	DMP 5	30	1.00(24)	1.00 (1)	.00 (1)	.00 (1)	.60 (3)	.52	.61
20	90	DMP 5	30	.86(24)	.00 (1)	.00 (1)	.00 (1)	.67 (3)	.30	.46
30	80	DMP 5	30	.82 (9)	.00 (1)	.00 (1)	1.00(12)	1.00 (7)	.56	.90
40	80	DMP 5	30	.90 (9)	.00 (1)	1.00 (1)	.92(12)	.86 (7)	.74	.90
10	90	WDRSD 2	54	.00 (1)	- (0)	- (0)	.98(52)	.33 (1)	.44	.59
20	90	WDRSD 2	54	1.00 (1)	- (0)	- (0)	.96(52)	.33 (1)	.76	.14
30	80	WDRSD 2	54	.95(41)	.50 (1)	- (0)	.50 (2)	.71 (5)	.67	.51
40	80	WDRSD 2	54	1.00(41)	1.00 (6)	- (0)	1.00 (2)	1.00 (5)	1.00	.91
10	80	DMP 2	78	.97(31)	1.00 (1)	1.00 (4)	.95(37)	.62 (5)	.91	.84
20	80	DMP 2	78	1.00(31)	1.00 (1)	1.00 (4)	.97(37)	.80 (5)	.95	.85
30	90	DMP 2	84	.65(41)	.43(23)	0.00 (9)	0.00 (3)	.72 (8)	.36	.41
40	90	DMP 2	84	.66(41)	.39(23)	.22 (9)	.67 (3)	.89 (8)	.57	.50
Mean				.82	.53	.40	.66	.71	.65	.64

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Events coded by the expert.

[c] - No events were coded for this category by either the observer or expert.

in distinguishing when students were in pairs or small groups. Considering only the occasions where the positive instances of the grouping observed by the expert was at least 10% of the total number of events, the range of marginal agreement for pairs is .39 to 1.00 and for small groups is 0.00 to 1.00. The lowest agreements occurred on Friday with the observer pairs 30-90 and 40-90 for a Grade 2 DMP class. The expert coded a higher frequency of pairs and small groups in this class than in any of the others. However, the observers did not code these two categories with any larger frequency than in other classes which indicates that the observers still lacked experience in identifying the use of pairs and small groups.

The overall marginals for the set of categories are influenced by disagreements where there are a low frequency of a category coded. In these cases the Cohen's κ appears to be more representative of the situation. The Cohen's κ ranges from .58 to .83 on Thursday and from .14 to .91 on Friday. The κ = .14 occurred when there was a very high agreement on one of the categories, large group, and a very low frequency of occurrence for all of the other categories. This increased the factor due to chance agreement and lowered the value of κ. Any difference in agreement on one of the 54 events has a large effect on the value of the kappa. In general the κ's for the set of grouping categories is reasonably high which indicates that even though the observers did not achieve great proficiency in coding pairs and small groups, overall they demonstrated an ability to code grouping since mainly large groups and individual work was used. There do appear to be some differences in agreement due to the expert. The observers consistently agreed more highly with expert 80 than with expert 90. Expert 80 developed the system and had the main responsibility for instructing the observers on the system. The low agreement then appears to be partly due to the expert rather than just with the observers.

Tables 3, 4, 5, 6 and 7 list the agreement coefficients for the material categories. Only paper and pencil materials (Table 3) were coded as being used in all of the classes observed. For the other materials, the coefficients are only reported for the classes where their use was coded at least once. For paper and pencil materials the marginal coefficient is high (generally above .90) as is the Cohen's κ (generally above .60). Thus the observers demonstrated facility in coding the use of paper and pencil materials. Disagreements were due to the interpretation of when students were not actually using paper and pencil at the precise moment the event was coded but where paper and pencil were still part of the ongoing activity and should be coded.

Manipulatives (Table 4) were observed, with one exception, only in DMP classes. There was higher agreement on Friday than on Thursday. The marginal agreements for DMP classes on Friday was generally above .80. The Cohen κ's for these ranged from .64 to .88 indicating the observers were adequate in identifying when manipulatives were being used. For the WDRSD Grade 2 class on Friday, Observer 20 coded playing bingo as using a manipulative rather than a game. This misinterpretation was discussed with the observer after the class and clarified at that time.

Games (Table 5) were observed being used very infrequently during the training session. For the Grade 2 WDRSD class on Friday, the marginal

TABLE 3

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Training Session: January 12 and 13, 1978

Paper and Pencil Material Category

Observer Pair		Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa (κ)
Obs[a]	Expert			Paper/pencil used	Paper/pencil not used	Other		
				Thursday, January 12, 1978				
10	90	WDRSD 2	54	.93 (39)[b]	.80 (15)	-[c] (0)	.86	.85
20	90	WDRSD 2	54	.87 (39)	.40 (15)	- (0)	.64	.40
30	80	WDRSD 2	60	.98 (49)	.00 (0)	.78 (11)	.57	.60
40	80	WDRSD 2	60	.98 (49)	.00 (0)	.82 (11)	.60	.72
10	80	DMP 2	84	.97 (61)	.67 (4)	1.00 (19)	.88	.78
20	80	DMP 2	84	1.00 (61)	1.00 (4)	1.00 (19)	1.00	.89
30	90	DMP 2	78	.90 (55)	.67 (15)	.88 (8)	.81	.57
40	90	DMP 2	78	.90 (55)	.67 (15)	.88 (8)	.81	.81
Mean				.94	.53	.89	.77	.70
				Friday, January 13, 1978				
10	90	DMP 5	30	.93 (27)	- (0)	.60 (3)	.76	.71
20	90	DMP 5	30	1.00 (27)	.00 (0)	.67 (3)	.56	.82
30	80	DMP 5	30	.83 (23)	.00 (0)	1.00 (7)	.61	.71
40	80	DMP 5	30	.96 (23)	.00 (0)	1.00 (7)	.65	.32
10	90	WDRSD 2	54	.00 (6)	.92 (47)	.33 (1)	.42	.16
20	90	WDRSD 2	54	.00 (6)	.92 (47)	.33 (1)	.42	-.05
30	80	WDRSD 2	54	.94 (47)	.50 (2)	.83 (5)	.76	.40
40	80	WDRSD 2	54	.96 (47)	.00 (2)	1.00 (5)	.65	.82
10	80	DMP 2	78	1.00 (45)	.89 (28)	.62 (5)	.84	.81
20	80	DMP 2	78	.98 (45)	1.00 (28)	.80 (5)	.93	.78
30	90	DMP 2	84	1.00 (73)	.00 (3)	.73 (8)	.58	.85
40	90	DMP 2	84	1.00 (73)	.67 (3)	.89 (8)	.85	.95
Mean				.80	.44	.73	.67	.65

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Events coded by the expert.

[c] - No Events were coded for this category by either the observer or expert.

TABLE 4

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Training Session: January 12 and 13, 1978

Manipulative Material Category

Observer Pair		Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa (κ)
Obs[a]	Expert			Manipulative Used	Manipulative Not Used	Other		
				Thursday, January 12, 1978				
10	90	WDRSD 2	54					
20	90	WDRSD 2	54					
30	80	WDRSD 2	60					
40	80	WDRSD 2	60					
10	80	DMP 2	84	1.00 (9)[b]	1.00 (56)	1.00 (19)	1.00	.85
20	80	DMP 2	84	.67 (9)	.95 (56)	1.00 (19)	.87	.87
30	90	DMP 2	78	.77 (23)	.87 (47)	.87 (8)	.84	.50
40	90	DMP 2	78	.56 (23)	.64 (47)	.87 (8)	.69	.51
Mean				.75	.86	.94	.85	.68
				Friday, January 13, 1978				
10	90	DMP 5	30	.64 (14)	.81 (13)	.60 (3)	.68	.67
20	90	DMP 5	30	.93 (14)	.87 (13)	.67 (3)	.82	.88
30	80	DMP 5	30					
40	80	DMP 5	30					
10	90	WDRSD 2	54					
20	90	WDRSD 2	54	.00 (0)	.00 (53)	.33 (1)	.11	.00
30	80	WDRSD 2	54					
40	80	WDRSD 2	54					
10	80	DMP 2	78	.92 (23)	.90 (50)	.62 (5)	.82	.64
20	80	DMP 2	78	.82 (23)	.92 (50)	.80 (5)	.84	.70
30	90	DMP 2	84	.88 (49)	.90 (27)	.73 (8)	.83	.73
40	90	DMP 2	84	.90 (49)	.87 (27)	.89 (8)	.89	.75
Mean				.72	.75	.66	.71	.62

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Events coded by the expert.

TABLE 5

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Training Session: January 12 and 13, 1978

Game

Observer Pair Obs[a]	Observer Pair Expert	Curriculum and Grade	Total Events Observed	Category Marginal: Game Used	Category Marginal: Game Not Used	Category Marginal: Other	Overall Marginal	Cohen's Kappa (κ)
			Thursday, January 12, 1978					
10	90	WDRSD 2	54					
20	90	WDRSD 2	54					
30	80	WDRSD 2	60					
40	80	WDRSD 2	60					
10	80	DMP 2	84					
20	80	DMP 2	84					
30	90	DMP 2	78					
40	90	DMP 2	78					
Mean								
			Friday, January 13, 1978					
10	90	DMP 5	30					
20	90	DMP 5	30					
30	80	DMP 5	30					
40	80	DMP 5	30					
10	90	WDRSD 2	54	.96 (53)[b]	–[c] (0)	.33 (1)	.65	.49
20	90	WDRSD 2	54	.00 (53)	.00 (0)	.33 (1)	.11	.00
30	80	WDRSD 2	54					
40	80	WDRSD 2	54					
10	80	DMP 2	78					
20	80	DMP 2	78					
30	90	DMP 2	84	.00 (3)	1.00 (73)	.73 (8)	.58	.85
40	90	DMP 2	84	.00 (3)	.97 (73)	.89 (8)	.62	.83
Mean				.24	.66	.57	.49	.54

[a] Observers 10 and 20 observed at WDRSD schools. Observers 30 and 40 observed at DMP schools.

[b] Events coded by the expert.

[c] – No Events were coded for this category by either the observer or expert.

TABLE 6

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Training Session: January 12 and 13, 1978

Audio-Visual Aid

Observer Pair		Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa (κ)
Obs[a]	Expert			AV Aid Used	AV Aid Not Used	Other		
				Thursday, January 12, 1978				
10	90	WDRSD 2	54					
20	90	WDRSD 2	54					
30	80	WDRSD 2	60					
40	80	WDRSD 2	60					
10	80	DMP 2	84					
20	80	DMP 2	84					
30	90	DMP 2	78					
40	90	DMP 2	78					
Mean								
				Friday, January 13, 1978				
10	90	DMP 5	30					
20	90	DMP 5	30					
30	80	DMP 5	30					
40	80	DMP 5	30					
10	90	WDRSD 2	54					
20	90	WDRSD 2	54					
30	80	WDRSD 2	54					
40	80	WDRSD 2	54					
10	80	DMP 2	78					
20	80	DMP 2	78					
30	90	DMP 2	84	.00 (1)	.97 (75)	.73 (8)	.57	.78
40	90	DMP 2	84	.00 (1)	1.00 (75)	.89 (8)	.63	.88
Mean				.00	.98	.81	.60	.83

TABLE 7

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Training Session: January 12 and 13, 1978

Printed Materials

Observer Pair		Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa (κ)
Obs[a]	Expert			Printed Mat. Used	Printed Mat. Not Used	Other		
				Thursday, January 12, 1978				
10	90	WDRSD 2	54	.92 (25)[b]	.94 (29)	–[c] (0)	.93	.78
20	90	WDRSD 2	54	.88 (25)	1.00 (29)	– (0)	.94	.40
30	80	WDRSD 2	60	.00 (0)	.98 (49)	.73 (11)	.57	.53
40	80	WDRSD 2	60	.00 (0)	.80 (49)	.82 (11)	.54	.40
10	80	DMP 2	84	.00 (0)	.99 (65)	1.00 (19)	.66	.83
20	80	DMP 2	84					
30	90	DMP 2	78					
40	90	DMP 2	78					
Mean				.36	.94	.85	.73	.59
				Friday, January 13, 1978				
10	90	DMP 5	30	.00 (0)	.82 (27)	.60 (3)	.47	.48
20	90	DMP 5	30	.00 (0)	1.00 (27)	.67 (3)	.56	.64
30	80	DMP 5	30	.00 (0)	.65 (23)	1.00 (7)	.55	.53
40	80	DMP 5	30	.00 (0)	.91 (23)	.86 (7)	.59	.68
10	90	WDRSD 2	54					
20	90	WDRSD 2	54	.00 (0)	.00 (53)	.33 (1)	.11	.00
30	80	WDRSD 2	54	.85 (20)	.94 (20)	.83 (5)	.87	.67
40	80	WDRSD 2	54	.95 (20)	.97 (29)	1.00 (5)	.97	.97
10	80	DMP 2	78					
20	80	DMP 2	78					
30	90	DMP 2	84					
40	90	DMP 2	84					
Mean				.26	.75	.76	.59	.57

[a] Observers 10 and 20 observed at WDRSD schools. Observers 30 and 40 observed at DMP schools.

[b] Events coded by the expert.

[c] –No Events were coded for this category by either the observer or expert.

TABLE 8

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Training Session: January 12 and 13, 1978

Learner Moves Categories

Observer Pair		Curriculum and Grade	Total Events Observed	Category Marginal							Overall Marginal	Cohen's Kappa κ
Obs[a]	Expert			EnW	EnO	EnC	NI	NW	NO	Other		
				Thursday, January 12, 1978								
10	90	WDRSD 2	54	.54(11)[b]	.29(2)	.88(15)	.86 (6)	.50(12)	.73(8)	–[c] (0)	.63	.27
20	90	WDRSD 2	54	1.00(11)	.33(2)	.83(15)	.83 (6)	.08(12)	.80(8)	.00 (0)	.64	.37
30	80	WDRSD 2	60	1.00 (9)	.33(2)	.81(21)	.50 (2)	.86 (6)	1.00(9)	.73(11)	.75	.65
40	80	WDRSD 2	60	.90 (9)	.50(2)	.91(21)	.50 (2)	.83 (6)	.89(9)	.82(11)	.76	.68
10	80	DMP 2	84	.50(10)	.38(3)	.83(30)	1.00 (3)	.67(12)	.86(7)	1.00(19)	.75	.49
20	80	DMP 2	84	.59(10)	.43(3)	.50(30)	.60 (3)	.58(12)	.50(7)	1.00(19)	.60	.55
30	90	DMP 2	78	.88(14)	.38(3)	.96(25)	.75 (12)	.14 (7)	.44(9)	.88 (8)	.63	.44
40	90	DMP 2	78	.82(14)	.50(3)	.86(25)	1.00 (12)	.29 (7)	.56(9)	.88 (8)	.70	.63
Mean				.78	.39	.82	.76	.49	.72		.68	.51
				Friday, January 13, 1978								
10	90	DMP 5	30	.64(11)	.00(0)	1.00 (9)	.00(00)	1.00(22)	1.00(5)	.60 (3)	.60	.40
20	90	DMP 5	30	.65(11)	.00(0)	.44 (9)	.– (01)	.50(22)	.40(5)	.67 (3)	.44	.36
30	80	DMP 5	30	.86 (7)	– (0)	.86 (6)	.50 (2)	.86 (7)	.33(1)	1.00 (7)	.73	.71
40	80	DMP 5	30	1.00 (7)	.00(0)	1.00 (6)	.50 (2)	1.00 (7)	.50(1)	.86 (7)	.69	.79
10	90	WDRSD 2	54	– (0)	.00(0)	.76(13)	.88 (8)	.80(30)	1.00(2)	.33 (1)	.63	.60
20	90	WDRSD 2	54	.00 (0)	.00(0)	.92(13)	.88 (8)	.90(30)	1.00(2)	.33 (1)	.58	.46
30	80	WDRSD 2	54	.80(12)	.50(4)	.86(14)	.50 (2)	1.00 (5)	.75(12)	.71 (5)	.73	.39
40	80	WDRSD 2	54	.75(12)	1.00(4)	1.00(14)	.29 (2)	.80 (5)	.33(12)	1.00 (5)	.74	.57
10	80	DMP 2	78	.62 (5)	.50(3)	.59(46)	.29 (4)	1.00(11)	1.00 (4)	.62 (5)	.66	.43
20	80	DMP 2	78	.80 (5)	.43(3)	.96(46)	.50 (4)	.91(11)	.75 (4)	.80 (5)	.74	.49
30	90	DMP 2	84	.47 (8)	.71(5)	.73(22)	.67 (12)	1.00 (7)	.95(19)	1.00(11)	.79	.50
40	90	DMP 2	84	.53 (8)	.71(5)	.86(22)	.58 (12)	.29 (7)	.76(19)	.82(11)	.65	.61
Mean				.65	.35	.83	.46	.84	.73		.66	.52

NOTE:

EnW - Engaged written	EnO - Engaged oral	EnC - Engaged covert
NI - Non-engaged interim	NW - Non-engaged waiting	NO - Non-engaged off-task

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Events coded by the expert.

[c] - No Events were coded for this category by either the observer or expert.

agreement for the pair 10-90 was .97. Observer 20 misinterpreted the situation and coded manipulative rather than a game as discussed above. On the other occasion when games were coded as being observed, the expert observer (90) coded three events involving a game where the two observers did not code any games being used. Because of the low frequency of the use of games during the training session it is difficult to judge the facility of the observers to code this category. This is also true for audio-visual aids (Table 6).

Printed materials (Table 7) on several occasions were coded by one of the observers but not by the expert as for the Thursday Grade 2 WDRSD class for pairs 30-80 and 40-80 and the Friday Grade 5 DMP classes for all pairs. On these occasions the number coded by the observer is small as can be deduced from the high marginal coefficients for not using printed materials. For the occasions where the expert coded printed materials being used, the marginal agreements are high (.92, .88, .85 and .95). Thus when printed materials were observed being used by the expert the agreement was reasonably high. This supports the conclusion that, along with the coefficients from the other material categories, the observers had fairly high agreement on coding the categories coded most frequently by the expert. But, with the exception of paper and pencil, the different kinds of materials were observed so infrequently during the training session that it is difficult to assess the true capabilities of the observers to code these categories from just the data collected during the training session except that there was high agreement that the materials were not used.

There are differences among the agreement coefficients for the agreement for the pair 10-90 was .96. Observer 20 misinterpreted the situation and coded manipulative rather than a game as discussed above. On the other occasion when a games were coded as being observed, the expert observer (90) coded three events involving a game where the two observers did not code any games being used. Because of the low frequency of the use of games during the training session it is difficult to judge the facility of the observers to code this category. This is also true for audio-visual aids (Table 6).

Printed materials (Table 7) on several occasions were coded by one of the observers but not by the expert as for the Thursday Grade 2 WDRSD class for pairs 30-80 and 40-80 and the Friday Grade 5 DMP classes for all pairs. On these occasions the number coded by the observer is small as can be deduced from the high marginal coefficients for not using printed materials. For the occasions where the expert coded printed materials being used, the marginal agreements are high (.92, .88, .85 and .95). Thus when printed materials were observed being used by the expert the agreement was reasonably high. This supports the conclusion that, along with the coefficients from the other material categories, the observers had fairly high agreement on coding the categories coded most frequently by the expert. But, with the exception of paper and pencil, the different kinds of materials were observed so infrequently during the training session that it is difficult to assess the true capabilities of the observers to code these categories from just the data collected during the training session except that there was high agreement that the materials were not used.

There are differences among the agreement coefficients for the learner move categories (Table 8) that are partially accounted for by the frequency of the number of events during which the category was coded. Engaged oral was very infrequently coded, less than 19% of the events for each class. The marginal agreements for this category are generally low and are unstable. Non-engaged waiting was coded more frequently for some of the classes. The marginal agreements increased significantly from Thursday to Friday indicating improvement on coding this category. On Friday the average marginal agreement for non-engaged waiting is .84. Non-engaged interim is a third category that was coded infrequently and had unstable marginal agreements. The agreements are reasonable for Thursday with an average marginal agreement of .76. For Friday the average marginal agreement is lower, .46, indicating some uncertainty of the observers in coding this category. The other three categories appear to be stable across days and acceptable. The average marginal agreements on Thursday and Friday for engaged written were .78 and .65, for engaged cover, .82 and .83, and for non-engaged off-task .72 and .73. For the set of categories over both days, the Cohen's κ's range from 127 to .79 with an average of .52. In general, the observers achieved an acceptable level of facility in coding three of the learner moves categories. They appeared to be more unstable in coding non-engaged interim. They improved sufficiently on Friday in coding non-engaged waiting to indicate they have a grasp of that category. Engaged oral occurred too infrequently to make any conclusions about the capability of the observers to code this category.

Table 9 lists the agreement coefficients for two of the interlearner move categories (Table 8) that are partially accounted for by the frequency of the number of events during which the category was coded. Engaged oral was very infrequently coded, less than 10% of the events for each class. The marginal agreements for this category are generally low and are unstable. Non-engaged waiting was coded more frequently for some of the classes. The marginal agreements increased significantly from Thursday to Friday indicating improvement on coding this category. On Friday the average marginal agreement for non-engaged waiting is .84. Non-engaged interim is a third category that was coded infrequently and had unstable marginal agreements. The agreements are reasonable for Thursday with an average marginal agreement of .76. For Friday the average marginal agreement is lower, .46, indicating some uncertainty of the observers in coding this category. The other three categories appear to be stable across days and acceptable. The average marginal agreements on Thursday and Friday for engaged written were .78 and .65, for engaged covert, .82 and .83, and for non-engaged off-task, .72 and .73. For the set of categories over both days, the Cohen's κ's range from .27 to .79 with an average of .52. In general, the observers achieved an acceptable level of facility in coding three of the learner moves categories. They appeared to be more unstable in coding non-engaged interim. They improved sufficiently on Friday in coding non-engaged waiting to indicate they have a grasp of that category. Engaged oral occurred too infrequently to make any conclusions about the capability of the observers to code this category.

Table 9 lists the agreement coefficients for two of the interaction categories,, target to student and teacher to group. These two categories were the only ones which were consistently observed across classes. The number of events coded by the expert for target to student was very small. The marginal agreements are unstable reflecting the low number of occurrences coded. There is some indication that observers tended to code more than the expert interactions of the target student talking to another student as indicated by the lack of agreement, for example, on Friday for the Grade 5 DMP class. On nine of the twenty occasions the marginal agreement for the category was .75 or above. These occasions included the two classes where the expert coded the greatest number of events involving this category, Thursday for Grade 2 DMP with pairs 30-90 and 40-90 and on Friday for Grade 2 WDRSD with pairs 30-80 and 40-80.

The category teacher to group was coded more frequently by the experts than the observers with the marginal agreement averaging .77 for Thursday and .45 on Friday. On the occasions where the expert coded the category for at least 10% of the events, the range of marginal agreement was above .60 except for one pair. The marginal agreements for not coding any interactions are high ranging from .71 to 1.00 with an average of .91. Thus observers were consistent in agreeing when interactions did not occur. Observers were less consistent in coding positive occurrences of the categories target to student and teacher to group. On most occasions these categories occurred infrequently which contributed to the instability of the agreement coefficient. It also is difficult to interpret the coefficients for the set of interaction categories because of the low frequency of the categories.

TABLE 9

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Training Session: January 12 and 13, 1978

Interactions Category

Observer Pair		Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa (κ)
Obs[a]	Expert			Target to Student	Teacher to Group	None of the above		
Thursday, January 12, 1978								
10	90	WDRSD 2	54	.50 (2)[b]	.46 (5)	.71 (45)	.39	.27
20	90	WDRSD 2	54	1.00 (2)	.80 (5)	.96 (45)	.65	.49
30	80	WDRSD 2	60	.75 (3)	.73 (11)	.96 (43)	.30	.73
40	80	WDRSD 2	60	.60 (3)	.92 (11)	.88 (43)	.56	.67
10	80	DMP 2	84	.17 (1)	.50 (8)	.93 (56)	.47	.32
20	80	DMP 2	84	.50 (1)	.80 (8)	.84 (56)	.29	.32
30	90	DMP 2	78	1.00 (6)	.92 (13)	1.00 (55)	.49	.54
40	90	DMP 2	78	.83 (6)	1.00 (13)	1.00 (55)	.81	.73
Mean				.67	.77	.91	.50	.51
Friday, January 13, 1978								
10	90	DMP 5	30	.50 (1)	- (0)	.93 (26)	.29	.12
20	90	DMP 5	30	1.00 (1)	- (0)	.93 (26)	.32	.30
30	80	DMP 5	30	-[c] (0)	.67 (3)	.96 (26)	.41	.53
40	80	DMP 5	30	.00 (0)	.60 (3)	.88 (26)	.30	.48
10	90	WDRSD 2	54	.00 (0)	.73 (8)	.89 (45)	.52	.32
20	90	WDRSD 2	54	- (0)	.13 (8)	.86 (45)	.25	.14
30	80	WDRSD 2	54	.75 (4)	0.00 (0)	.96 (47)	.53	.31
40	80	WDRSD 2	54	1.00 (4)	- (0)	.98 (47)	.40	.67
10	80	DMP 2	78	1.00 (2)	.62 (21)	.86 (49)	.35	.46
20	80	DMP 2	78	1.00 (2)	.88 (21)	.86 (49)	.61	.64
30	90	DMP 2	84	.33 (3)	- (0)	.92 (75)	.38	.18
40	90	DMP 2	84	.50 (3)	0.00 (0)	.95 (75)	.35	.36
Mean				.61	.45	.92	.39	.38

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Events coded by the expert.

[c] -No Events were coded for this category by either the observer or expert.

Summarizing the results of the analyses of the marginal agreements, for most categories the marginal agreements between the observer and the expert are consistently high. A few categories were coded very infrequently making it difficult to assess the ability of the observers in coding these. These categories are pair, small group, engaged oral and most of the materials and interactions categories. The marginal coefficients for the non-engaged interim category varied by observer pair and from class to class. The coding of this category is more unstable than the others which may be related to how it is defined.

Generalizability of the Categories. The generalizability coefficients from the training session for each observer trio and for each category are given in Table 10. These can be interpreted as an indication of the amount of variance due to the class when considering the interaction between the observers and the class. A high coefficient indicates that most of the variance is due to the class and not to the difference among the observers. A low coefficient indicates that there is some interaction among the observers and the class. That is, observers coded the category differently for different classes.

The coefficients for most of the categories are high, above .80. Categories with consistently lower coefficients are pair, engaged-oral, non-engaged interim, and non-engaged waiting. Engaged-written has very low coefficients for the sessions with observer trios 10,20,80 and 30, 40, 90 but has high coefficients for the other three classes. Zero coefficients for some of the categories (engaged oral and non-engaged interim and waiting) indicate that there was no variance due to class. Thus the classes observed

TABLE 10

Summary Generalizability Coefficients

Training Session

		3 classes - 2 days		2 classes - 2 days	
		Observer Trio		Observer Trio	
	Observation Category	10x20x90	30x40x80	10x20x80	30x40x90
1.	Self-paced	.96	.99	.49	.82
2.	Other-paced	.99	.97	.83	.77
3.	General Content	.36	.69	.98	.90
4.	Individual	.95	.99	.96	.64
5.	Pair	.70	.76	.49	.33
6.	Small Group	.94	.57	.95	.99
7.	Large Group	.99	.98	.95	.98
8.	General Content	.78	.69	.98	.40
9.	Engaged-Written	.86	.91	.05	.10
10.	Engaged-Oral	.81	.61	.00	.00
11.	Engaged-Covert	.81	.94	.46	.76
12.	Non Engaged-Interim	.97	.37	.00	.45
13.	Non Engaged-Waiting	.93	.63	.00	.00
14.	Non Engaged-Off Task	.89	.71	.31	.89
15.	General Content	.36	.69	.98	.40
16.	Paper/pencil Materials	.98	.99	.99	.94
17.	Total Engagement	.90	.93	.59	.95
18.	Total Non Engagement	.95	.85	.04	.96

were very similar on these categories. For the categories of pair and engaged written, the low non-zero coefficients indicate that the variance due to the interaction between the observer and class was high compared to the variance due to the class. On these categories there is more disagreement among the observers.

Generalizability coefficients are given for the sum of the three engaged categories (Total Engagement) and for the three non-engaged categories (Total Non-engagement). With the exception of one observer trio, the coefficients for these two composite categories are high. Observers in some cases disagreed as to how the students were engaged or non-engaged, but they did agree that the students were engaged or non-engaged.

Summary of Training Session Observer Agreement. On many of the categories the observers demonstrated that they achieved a high degree of competency in coding the category. In coding the categories of pair, non-engaged interim and non-engaged waiting the observers were less consistent. The agreement among observers on these categories need to be checked carefully during the on-site visits and retraining sessions. A few categories (small group and engaged oral) were rarely observed by either the expert or the observers during the training session making it impossible to assess the true ability of the observers to code these categories except that there was high agreement that the categories did not occur.

Retraining Session

The summaries of the category marginals, overall marginals, and the Cohen's κ for the DMP and WDRSD retraining session are given in Tables 11 through 20. Table 21 gives the summary of means of the category marginals for both the training and retraining sessions. The summary of the means of the Cohen's κ for both sessions are given in Table 22. The generalizability coefficients for each category for the retraining session are given in Table 23. The contingency tables showing the frequencies for each category by observer pair for the retraining session are included in Appendix B.

There is still variation in the marginal agreements for categories from class to class. Often the lower marginal agreements correspond to a low frequency of positive occurrences observed by the expert. For example, in Table 12 for Thursday Grade 2 WDRSD, the lower marginal coefficients (.57 and .56) occurred when the expert only coded 7 or 5 events as individual. In Table 11 for other paced, the lower marginals of .00 and .43 on Thursday occurred when 2 and 7 events, respectively, were coded by the expert as being other paced. It appears that the observers are coding the main activity with accuracy, but if there is some deviation, such as one student working individually while the other students are working in a large group, this point is missed on occasion by some of the observers.

The means of the category marginal (Table 21) indicate that on the categories of pair, games, printed materials, engaged-writing, engaged-oral, non-engaged off-task, and teacher to group interactions the observers improved in their ability to code these after doing seven observations.

The mean marginals were down considerably for manipulatives and slightly for other-paced and target to student interactions. Manipulatives were not used as much during the classes observed for the retraining session (Table 14) as they were during the training session (Table 4). Again observers agreed closely on what materials were used over a long period of time, but were more inconsistent in agreeing when materials were used only on a few occasions. The mean of the marginals for the other categories remained approximately the same.

Considering each set of categories and the means of the Cohen's κ, paper and pencil materials, printed materials, and learner moves generally had means higher for the retraining session than for the training session (Table 22). The only category with a distinct decrease in the means of the Cohen's κ is manipulatives. The Cohen's κ can be interpreted as the percent of agreement beyond chance agreement. The κ's above .70 are considered to be reasonably high.

Considering both the data from the training and retraining sessions there is reasonable agreement on the following categories:

Self paced
Other paced
Individual
Large Group
Paper/pencil
Engaged-written
Engaged-covert
Non-engaged off-task

The agreement on the category engaged-oral was low for the training sessions, but improved to an acceptable level for the retraining session. Students only occasionally would talk during the classes observed so that the category of engaged-oral had very low frequencies. The class with the highest frequency of positive occurrences of engaged-oral for the retraining session (Table 19) had 8 of 90 events coded by the expert as having engaged-oral.

The categories with consistently low observer agreement are:

Pair

Small group

Printed materials

Non-engaged interim

Non-engaged waiting

Target to student interactions

Teacher to group interactions

For the categories of pair and small group for the retraining sessions (Table 12), agreement was reasonable if, for either of the groupings, the grouping occurred on more than two events. Disregarding the marginal agreements for pair when the expert coded pairs for two or less events, the average marginal agreement was .70 and .76 for the two days. On no occasion in the retraining session did an observer code a pair when the expert did not code any pairs. For the five observer pairs where the expert observed more than two small groups, the average marginal agreement was .90. On only one of the occasions, Grade 2 DMP Friday observers 10-20-90, did the observers code a small group when the expert did not observe any. For these two categories, it appears that the agreement was high or reasonable when pairs and groups were used more than just on occasion during the period. The observers were not as sensitive when two or three students would form a group, discuss some work and then continue with their own individual work. These "informal" pairs and small groups were more difficult for the observers to identify.

For printed materials (Table 17) the agreement was high when printed materials were not used. The disagreement on when printed materials were used is mainly due to deciding if the printed materials were part of the on-going activity. The observers were to code printed materials if the materials were on the desk and used at sometime during the on-going activity. The student did not have to be reading from the printed material at the moment observed for printed materials to be coded as part of the on-going activity. Instead observers generally coded printed materials when they were actually being used. This is also true for the other materials categories of games, audio-visual and manipulatives. However, these materials were used very infrequently making it difficult to get any true measure of observer agreement.

The two non-engaged categories of interim and waiting are similar to pair and small group categories. On occasions where the expert observed two or more events with one of these categories, there was reasonable agreement. The average marginal agreements for each of the two days, when only counting occasions with more than two events coded by the expert, were .80 and .74 for interim and .75 and .69 for waiting. Again the observers agreed reasonably well if the category occurred on more than two events. Disagreement on these categories generally occurred when there was little time spent in interim or waiting activities.

Interactions occurred infrequently during the classes (Table 20). Marginal agreements are reported for the two interactions that were coded the most, target to student and teacher to group. For both of these interactions the number of positive events observed by the expert was generally 20% or less of the total number of events coded. The marginal agreements are high for observer pairs coding when there were no interactions. The marginal agreements, however, are low on target to student interaction. For teacher to group interactions the agreements are reasonably high on one day (Friday), but lower on the other. The average marginal agreements are similar to those for the training session with a similar variation between the two days. Observer agreement is acceptable in coding teacher to group interactions since agreement is generally high when there were a significant number of interactions, more than 10% of the events. Also the agreement increased on the second day of the training session indicating improvement of the ability in observing this category. The frequency of occurrence of target to students was so small that it is difficult to measure the true capability of the observers in coding this category except that there is high agreement in not coding the category.

Generalizability Coefficients. The generalizability coefficients computed across the three classes for both days of the retraining session for each observer group are given in Table 23. The coefficients are calculated treating day as a fixed effect. That is, the assumption was made that variations in the categories from day to day are expected and are not treated as error. Most of the coefficients are extremely high, above .90, indicating that the variation among the observers was very low in relationship to the variation among the classes. In some cases the coefficient is zero, general content for observers 10, 20, 90 and engaged-oral for observers 40, 80. This indicates that there was very little variation among the classes for the category. In the case of general content one observer group had .00 and the other had a coefficient of .96. This indicates that when there was enough variation among the classes on general content the observers agreed highly on this category. For engaged-oral, both coefficients are low. Thus there is disagreement on this category even though there is little variation among classes. partly because of the low frequency of the category. The only other category that is low for both observer groups is pair. There is some disagreement among observers across classes in coding the use of pairs.

Other categories have coefficients that vary between the two observation groups -- engaged-covert, total engagement, non-engaged interim, and non-engaged off task. The observers in one of the groups varied somewhat on these categories in realtionship to the variance among classes. This indicates that these categories are more unstable than the others but still reasonably high with coefficient values of .60 or above. Total engagement for the group 10,20,90 has a coefficinet of .46 which is fairly low. This probably is associated with the variation among observers in coding engaged-oral since the coefficients for the other two engaged categories are high.

Retraining Session Summary. On most of the categories the agreement among observers in coding the categories is high as indicated by the high marginal agreements and generalizability coefficients. The categories with questionable agreement are generally those which were observed infrequently. The coding of pairs was low as indicated by both the marginal agreements and the generalizability coefficients. Observers improved from the training session to the retaining session in coding engaged-oral, but observers still varied greatly on the category as indicated by the low generalizability coefficients. Non-engaged interim and non-engaged waiting both had low marginal agreements but had relatively high generalizability coefficients. Observers disagree somewhat in coding one class on these categories but the agreement is sufficient enough to distinguish the use of these categories among classes. Frequent use of small groups is coded with high agreement. An occasional use of small groups where three or four students come together briefly to work on a problem and then continue with their individual work is more difficult for the observers to identify. Overall, the observers code small groups with enough accuracy to distinguish among classes as indicated by the high generalizability coefficients for this category. Observers have high agreement in instances when interactions do not occur. There is disagreement in observing particular types of interactions. The different kinds of interactions occur so infrequently that it is difficult to assess the agreement among the observers when observing in actual classroom situations. Similarly the observance of the use of most of the kinds of materials was so infrequent that it is impossible with the data collected to assess what is the agreement among observers except that they agreed highly that the materials were not used.

TABLE 11

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Pace

Observer Pair Obs[a]	Expert	Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa κ
				Self	Other	No Pace		
				Thursday, March 16, 1978				
10	90	DMP 5	90	.99 (82)[c]	.60 (3)	.80 (5)	.80	.56
20	90	DMP 5	90	.99 (82)	.00 (3)	1.00 (5)	.57	.64
30	80	DMP 5	–[b]					
40	80	DMP 5	90	.88 (29)	.96 (49)	.50 (12)	.78	.76
10	90	WDRSD 2	66	.88 (8)	.90 (46)	.67 (12)	.82	.79
20	90	WDRSD 2	66	1.00 (8)	.96 (46)	.83 (12)	.93	.76
30	80	WDRSD 2	–					
40	80	WDRSD 2	60	.56 (5)	.89 (37)	1.00 (18)	.82	.88
10	90	DMP 2	84	.96 (70)	.43 (7)	.88 (7)	.75	.78
20	90	DMP 2	84	.96 (70)	.78 (7)	.88 (7)	.87	.66
30	80	DMP 2	–					
40	80	DMP 2	78	.85 (44)	.83 (30)	.25 (4)	.64	.69
	Mean			.90	.70	.76	.78	.65
				Friday, March 17, 1978				
10	90	DMP 5	90	.97 (75)	1.00 (2)	.85 (13)	.94	.75
20	90	DMP 5	90	.97 (75)	.50 (2)	.92 (13)	.80	.83
30	80	DMP 5	90	.76 (38)	.82 (50)	.00 (2)	.53	.73
40	80	DMP 5	90	.95 (38)	.96 (50)	1.00 (2)	.97	.83
10	90	WDRSD 2	66	.78 (25)	.76 (33)	.89 (8)	.81	.73
20	90	WDRSD 2	66	.74 (25)	.73 (33)	1.00 (8)	.82	.68
30	80	WDRSD 2	60	.92 (24)	1.00 (32)	.50 (4)	.81	.82
40	80	WDRSD 2	60	.92 (24)	1.00 (32)	.50 (4)	.81	.94
10	90	DMP 2	84	.85 (35)	.86 (42)	1.00 (7)	.90	.71
20	90	DMP 2	84	.88 (35)	.83 (42)	.78 (7)	.83	.69
30	80	DMP 2	84	.77 (62)	.63 (19)	.50 (3)	.64	.62
40	80	DMP 2	84	.90 (62)	.76 (19)	1.00 (3)	.89	.84
	Mean			.87	.82	.74	.81	.76

a Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

b Observer 30 did not attend the first day of the retraining.

c Events coded by the expert.

TABLE 12

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Grouping

Observer Pair Obs[a]	Expert	Curriculum and Grade	Total Events Observed	Category Material					Overall Marginal	Cohen's Kappa κ
				Ind	Pair	Small Group	Large Group	No Group		
Thursday, March 16, 1978										
10	90	DMP 5	90	.92(66)[c]	.53(17)	.40 (2)	-[d](0)	.80 (5)	.66	.49
20	90	DMP 5	90	.94(66)	.71(17)	.50 (2)	- (0)	.71 (5)	.72	.47
30	80	DMP 5	-[b]							
40	80	DMP 5	90	.88(28)	.50 (2)	- (0)	.94(48)	.50 (12)	.70	.75
10	90	WDRSD 2	66	.86 (7)	.67 (2)	- (0)	.92(45)	.67 (12)	.78	.80
20	90	WDRSD 2	66	.57 (7)	.50 (2)	- (0)	.94(45)	.83 (12)	.71	.74
30	80	WDRSD 2	-							
40	80	WDRSD 2	60	.56 (5)	- (0)	.89 (37)	- (0)	1.00 (18)	.82	.88
10	90	DMP 2	84	.88(57)	.64(11)	.00 (2)	.57 (7)	.88 (7)	.59	.66
20	90	DMP 2	84	.93(57)	.92(11)	.00 (2)	.43 (7)	.88 (7)	.63	.65
30	80	DMP 2	-							
40	80	DMP 2	78	.93(42)	.29 (2)	.33 (12)	.86(18)	.25 (4)	.53	.56
	Mean			.83	.60	.35	.78	.72	.68	.67
Friday, March 17, 1978										
10	90	DMP 5	90	.92(62)	.86 (7)	.75 (8)	- (0)	.85 (13)	.84	.68
20	90	DMP 5	90	.98(62)	.78 (7)	.88 (8)	.00 (0)	.92 (13)	.71	.67
30	80	DMP 5	90	.74(31)	.62 (8)	.00 (2)	.87 (47)	.00 (2)	.45	.72
40	80	DMP 5	90	.78(31)	.25 (8)	.00 (2)	.98 (47)	1.00 (2)	.60	.69
10	90	WDRSD 2	66	.75(18)	.82 (11)	.50 (1)	.79 (28)	.89 (8)	.75	.70
20	90	WDRSD 2	66	.86(18)	.85 (11)	.25 (1)	.71 (28)	1.00 (8)	.73	.65
30	80	WDRSD 2	60	.86(21)	1.00 (3)	- (0)	.94 (32)	.50 (4)	.82	.89
40	80	WDRSD 2	60	.91(21)	1.00 (3)	- (0)	1.00 (32)	.50 (4)	.85	.94
10	90	DMP 2	84	.92(33)	.42 (5)	.00 (0)	.69 (39)	1.00 (7)	.60	.66
20	90	DMP 2	84	.97(33)	.83 (5)	.00 (0)	.87 (39)	.78 (7)	.69	.72
30	80	DMP 2	84	.92(48)	.92 (12)	1.00 (3)	.78 (18)	1.00 (3)	.92	.77
40	80	DMP 2	84	1.00(48)	.75 (12)	1.00 (3)	.86 (18)	1.00 (3)	.92	.74
	Mean			.88	.76	.44	.77	.79	.74	.74

[a] Observers 10 and 20 observed at WDRSD schools. Observers 30 and 40 observed at DMP schools.

[b] Observer 30 did not attend first day of the retraining session.

[c] Events coded by the expert.

[d] No events were coded for this category by either the expert or the observer.

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TABLE 13

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Paper/Pencil

Observer Pair Obs[a]	Expert	Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa κ
				Paper/pencil used	Paper/pencil not used	Other		
				Thursday, March 16, 1978				
10	90	DMP 5	90	.76 (82)[c]	.12 (3)	.80 (5)	.56	.29
20	90	DMP 5	90	1.00 (82)	.33 (3)	.71 (5)	.68	.66
30	80	DMP 5	–[b]					
40	80	DMP 5	90	.85 (60)	.54 (18)	.50 (12)	.63	.59
10	90	WDRSD 2	66	.83 (10)	.96 (44)	.67 (12)	.82	.78
20	90	WDRSD 2	66	.80 (10)	.92 (44)	.83 (12)	.85	.84
30	80	WDRSD 2	–					
40	80	WDRSD 2	60	.74 (25)	.47 (17)	1.00 (18)	.74	.76
10	90	DMP 2	84	.99 (77)	– [d](0)	.88 (7)	.93	.93
20	90	DMP 2	84	.99 (77)	– (0)	.88 (7)	.93	.93
30	80	DMP 2	–					
40	80	DMP 2	78	.98 (47)	.93 (27)	.25 (4)	.72	.87
	Mean			.88	.61	.72	.76	.74
				Friday, March 17, 1978				
10	90	DMP 5	90	.96 (77)	.00 (0)	.84 (13)	.60	.72
20	90	DMP 5	90	1.00 (77)	.00 (0)	.92 (13)	.64	.91
30	80	DMP 5	90	.88 (76)	.33 (12)	.00 (2)	.41	.23
40	80	DMP 5	90	.93 (76)	.71 (12)	1.00 (2)	.88	.82
10	90	WDRSD 2	66	.58 (41)	.52 (17)	.89 (8)	.66	.59
20	90	WDRSD 2	66	.98 (41)	.94 (17)	1.00 (8)	.97	.80
30	80	WDRSD 2	60	.96 (51)	1.00 (5)	.50 (4)	.82	.86
40	80	WDRSD 2	60	.94 (51)	.80 (5)	.50 (4)	.75	.78
10	90	DMP 2	84	.89 (47)	.86 (30)	1.00 (7)	.92	.75
20	90	DMP 2	84	.94 (47)	.83 (30)	.78 (7)	.85	.72
30	80	DMP 2	84	.96 (66)	.83 (15)	1.00 (3)	.93	.90
40	80	DMP 2	84	.97 (66)	.87 (15)	1.00 (3)	.95	.93
	Mean			.92	.64	.78	.78	.75

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Observer 30 did not attend first day of the retraining session.

[c] Events coded by the expert.

[d] No events were coded for this category by either the expert or the observer.

TABLE 14

Summary of the Category Marginal, Overall Marginal
and Cohen's Kappa Observer Agreement Coefficients for
the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Manipulative Material Category

Observer Pair Obs[a]	Expert	Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa κ.
				Manipulative Used	Manipulative Not Used	Other		
			Thursday, March 16, 1978					
10	90	DMP 5	90	.25 (4)[c]	.95 (81)	.80 (5)	.67	.55
20	90	DMP 5	90	.00 (4)	.98 (81)	.71 (5)	.56	.60
30	80	DMP 5	—[b]					
40	80	DMP 5	90	.41 (15)	.75 (63)	.50 (12)	.55	.52
10	90	WDRSD 2	66					
20	90	WDRSD 2	66					
30	80	WDRSD 2	-					
40	80	WDRSD 2	60	.11 (9)	.86 (65)	.25 (4)	.40	.10
10	90	DMP 2	84					
20	90	DMP 2	84					
30	80	DMP 2	-					
40	80	DMP 2	78					
	Mean			.19	.88	.56	.54	.44
			Friday, March 17, 1978					
10	90	DMP 5	90	.00 (0)	1.00 (77)	.85 (13)	.62	.82
20	90	DMP 5	90					
30	80	DMP 5	90	.48 (12)	.86 (76)	.00 (2)	.44	.43
40	80	DMP 5	90	.67 (12)	.95 (76)	1.00 (2)	.87	.72
10	90	WDRSD 2	66					
20	90	WDRSD 2	66					
30	80	WDRSD 2	60	.98 (56)	.00 (0)	.50 (4)	.49	.41
40	80	WDRSD 2	60	.80 (56)	.00 (0)	.50 (4)	.44	.27
10	90	DMP 2	84	.00 (0)	.99 (77)	1.00 (7)	.66	.49
20	90	DMP 2	84					
30	80	DMP 2	84	.00 (1)	.99 (80)	1.00 (3)	.66	.85
40	80	DMP 2	84	1.00 (1)	1.00 (80)	1.00 (3)	1.00	1.00
	Mean			.49	.72	.73	.65	.63

a Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

b Observer 30 did not attend Thursday of the Retraining session.

c Events coded by the expert.

TABLE 15

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Game

Observer Pair Obs[a]	Expert	Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa κ
				Game Used	Game Not Used	Other		
				Thursday, March 16, 1978				
10	90	DMP 5	90					
20	90	DMP 5	90					
30	80	DMP 5	-[b]					
40	80	DMP 5	90	.00 (4)[c]	.88 (74)	.50 (12)	.46	.50
10	90	WDRSD 2	66					
20	90	WDRSD 2	66					
30	80	WDRSD 2	-					
40	80	WDRSD 2	60					
10	90	DMP 2	84					
20	90	DMP 2	84					
30	80	DMP 2	-					
40	80	DMP 2	78					
	Mean			.00	.88	.50	.46	.50
				Friday, March 17, 1978				
10	90	DMP 5	90					
20	90	DMP 5	90					
30	80	DMP 5	90					
40	80	DMP 5	90					
10	90	WDRSD 2	66					
20	90	WDRSD 2	66					
30	80	WDRSD 2	60					
40	80	WDRSD 2	60					
10	90	DMP 2	84	.00 (34)	.56 (43)	1.00 (7)	.52	.11
20	90	DMP 2	84	.00 (34)	.57 (43)	.78 (7)	.45	.13
30	80	DMP 2	84	.80 (8)	.97 (73)	1.00 (3)	.92	.91
40	80	DMP 2	84	.75 (8)	.97 (73)	1.00 (3)	.91	.89
	Mean			.39	.77	.94	.70	.51

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Observer did not attend first day of the retraining session.

[c] Events coded by the expert.

TABLE 16

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Audio-Visual Aid

Observer Pair Obs[a]	Expert	Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa κ
				AV Aid Used	AV Aid Not Used	Other		
			Thursday, March 16, 1978					
10	90	DMP 5	90					
20	90	DMP 5	90					
30	80	DMP 5	--[b]					
40	80	DMP 5	90					
10	90	WDRSD 2	66					
20	90	WDRSD 2	66					
30	80	WDRSD 2	-					
40	80	WDRSD 2	60					
10	90	DMP 2	84					
20	90	DMP 2	84					
30	80	DMP 2	-					
40	80	DMP 2	78					
	Mean							
			Friday, March 17, 1978					
10	90	DMP 5	90					
20	90	DMP 5	90					
30	80	DMP 5	90					
40	80	DMP 5	90					
10	90	WDRSD 2	66					
20	90	WDRSD 2	66	.00 (0)[c]	.95 (58)	1.00 (8)	.65	.82
30	80	WDRSD 2	60					
40	80	WDRSD 2	60					
10	90	DMP 2	84					
20	90	DMP 2	84					
30	80	DMP 2	84					
40	80	DMP 2	84					
	Mean			.00	.95	1.00	.65	.82

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Observer did not attend first day of the retraining session.

[c] Events coded by the expert.

TABLE 17

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Printed Materials

Observer Pair Obs[a]	Expert	Curriculum and Grade	Total Events Observed	Category Marginal: Printed Materials Used	Category Marginal: Printed Materials Not Used	Category Marginal: Other	Overall Marginal	Cohen's Kappa κ
				Thursday, March 16, 1978				
10	90	DMP 5	90	1.00 (11)[c]	.99 (74)	.80 (5)	.93	.78
20	90	DMP 5	90	.73 (11)	.99 (74)	.71 (5)	.81	.74
30	80	DMP 5	–[b]					
40	80	DMP 5	90	.74 (14)	.98 (64)	.50 (12)	.74	.72
10	90	WDRSD 2	66					
20	90	WDRSD 2	66					
30	80	WDRSD 2	–					
40	80	WDRSD 2	60	.47 (17)	.74 (25)	1.00 (18)	.74	.76
10	90	DMP 2	84					
20	90	DMP 2	84					
30	80	DMP 2	–					
40	80	DMP 2	78	.88 (7)	.97 (67)	.25 (4)	.70	.67
	Mean			.76	.93	.65	.78	.73
				Friday, March 17, 1978				
10	90	DMP 5	90	.10 (1)	.91 (76)	.85 (13)	.62	.57
20	90	DMP 5	90	.00 (1)	.97 (76)	.92 (13)	.63	.91
30	80	DMP 5	90	.93 (14)	.99 (74)	.00 (2)	.64	.81
40	80	DMP 5	90	.93 (14)	.99 (75)	1.00 (2)	.97	.89
10	90	WDRSD 2	66	.71 (14)	.94 (44)	.89 (8)	.85	.84
20	90	WDRSD 2	66	.00 (14)	.76 (44)	1.00 (8)	.59	.47
30	80	WDRSD 2	60					
40	80	WDRSD 2	60					
10	90	DMP 2	84	.00 (1)	.99 (76)	1.00 (7)	.66	.49
20	90	DMP 2	84	.00 (1)	.99 (76)	.78 (7)	.59	.54
30	80	DMP 2	84					
40	60	DMP 2	84					
	Mean			.33	.94	.80	.69	.69

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Observer did not attend first day of the retraining session.

[c] Events coded by the expert.

TABLE 18

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Other Materials Category

Observer Pair Obs[a]	Expert	Curriculum and Grade	Total Events Observed	Category Marginal: Other Materials Used	Category Marginal: Other Materials Not Used	Category Marginal: Other	Overall Marginal	Cohen's Kappa κ
				Thursday, March 16, 1978				
10	90	DMP 5	90	.92 (12)[c]	.97 (73)	.80 (5)	.90	.93
20	90	DMP 5	90	.92 (12)	.96 (73)	.71 (5)	.86	.84
30	80	DMP 5	–[b]					
40	80	DMP 5	90					
10	90	WDRSD 2	66					
20	90	WDRSD 2	66					
30	80	WDRSD 2	–					
40	80	WDRSD 2	60					
10	90	DMP 2	84					
20	90	DMP 2	84					
30	80	DMP 2	–					
40	80	DMP 2	78	1.00 (2)	.96 (72)	.25 (4)	.74	.65
	Mean			.95	.73	.59	.83	.81
				Friday, March 17, 1978				
10	90	DMP 5	90	.33 (6)	.92 (71)	.85 (13)	.70	.78
20	90	DMP 5	90	.00 (6)	.91 (71)	.92 (13)	.61	.74
30	80	DMP 5	90					
40	80	DMP 5	90					
10	90	WDRSD 2	66	1.00 (1)	.98 (57)	.89 (8)	.96	.82
20	90	WDRSD 2	66	.00 (1)	.98 (57)	1.00 (8)	.66	.93
30	80	WDRSD 2	60					
40	80	WDRSD 2	60					
10	90	DMP 2	84	.50 (1)	.99 (76)	1.00 (7)	.83	.55
20	90	DMP 2	84	1.00 (1)	.97 (76)	.78 (7)	.92	.51
30	80	DMP 2	84	.00 (1)	.99 (80)	1.00 (3)	.66	.85
40	80	DMP 2	84	1.00 (1)	1.00 (80)	1.00 (3)	1.00	1.00
	Mean			.48	.97	.93	.79	.77

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Observer did not attend first day of the retraining session.

[c] Events coded by the expert.

TABLE 19

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Onserver Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Learner Moves

Observer Pair Obs[a]	Observer Pair Expert	Curriculum and Grade	Total Events Observed	Category Material Written	Oral	Covert	Interim	Waiting	Off-Task	No Learner Move	Overall Marginal	Cohen's Kappa κ
				Thursday, March 16, 1978								
10	90	DMP 5	90	.90(29)[c]	.75(8)	.79(15)	.88(15)	.33 (3)	.88(15)	.80 (5)	.76	.53
20	90	DMP 5	90	.90(29)	1.00(8)	.88(15)	.83(15)	1.00 (3)	.73(15)	.71 (5)	.87	.57
30	80	DMP 5	–[b]									
40	80	DMP 5	90	.94(15)	.50(2)	.90(30)	.75 (3)	.68 (15)	.85(13)	.50 (12)	.73	.65
10	90	WDRSD 2	66	1.00 (4)	.67(6)	.97(38)	.00 (0)	.00 (0)	.83 (6)	.67 (12)	.59	.59
20	90	WDRSD 2	66	.75 (4)	1.00(6)	1.00(38)	.00 (0)	.00 (0)	.86 (6)	.83 (12)	.63	.68
30	80	WDRSD 2	–									
40	80	WDRSD 2	60	1.00(10)	.60(5)	.94(17)	.60 (3)	.88 (7)	–[d](0)	1.00 (18)	.84	.79
10	90	DMP 2	84	.76(25)	.80(5)	.78(21)	1.00 (3)	.73 (8)	.80(15)	.88 (7)	.82	.45
20	90	DMP 2	84	1.00(25)	.71(5)	.81(21)	.75 (3)	.89 (8)	.93(15)	.88 (7)	.85	.62
30	80	DMP 2	–									
40	80	DMP 2	78	1.00(13)	.33(4)	.63(38)	.83 (6)	.70 (7)	.50 (6)	.50 (4)	.64	.40
	Mean			.92	.67	.86	.63	.58	.80	.75	.74	.59
				Friday, March 17, 1978								
10	90	DMP 5	90	.95(19)	1.00(1)	.96(22)	1.00 (8)	.00 (0)	.90(27)	.85 (13)	.81	.66
20	90	DMP 5	90	.63(19)	1.00(1)	.54(22)	1.00 (8)	.00 (0)	.96(27)	.92 (13)	.74	.63
30	80	DMP 5	90	.79(22)	.86(6)	.81(31)	.50 (2)	1.00 (17)	.90(10)	.00 (2)	.69	.54
40	80	DMP 5	90	.96(22)	1.00(6)	.84(31)	.50 (2)	.59 (17)	.80(10)	1.00 (2)	.81	.59
10	90	WDRSD 2	66	.82 (9)	.38(3)	1.00(25)	.17 (6)	.60 (5)	.80(10)	.80 (8)	.65	.48
20	90	WDRSD 2	66	.64 (9)	.50(3)	.76(25)	.83 (6)	.71 (5)	.70(10)	1.00 (8)	.74	.59
30	80	WDRSD 2	60	.74(14)	.67(2)	.52(23)	.00 (0)	.44 (8)	.56 (9)	.50 (4)	.49	.50
40	80	WDRSD 2	60	.88(14)	1.00(2)	.88(23)	.00 (0)	.89 (8)	.22 (9)	.50 (4)	.62	.62
10	90	DMP 2	84	.77(13)	.67(2)	.80(24)	.86 (6)	.52 (25)	.50 (7)	1.00 (7)	.73	.48
20	90	DMP 2	84	.54(13)	.33(2)	.89(24)	.83 (6)	.76 (25)	.64 (7)	.78 (7)	.68	.52
30	80	DMP 2	84	.94(16)	1.00(2)	.87(34)	.44 (9)	.67 (4)	.81(16)	1.00 (3)	.82	.56
40	80	DMP 2	84	.70(16)	.50(2)	.85(34)	.78 (9)	.75 (4)	.89(16)	1.00 (3)	.78	.61
	Mean			.78	.74	.81	.58	.58	.72	.78	.71	.56

[a] Observers 10 and 20 observed at WDRSD schools. Observers 30 and 40 observed at DMP schools.

[b] Observer 30 did not attend first day of the retraining session.

[c] Events coded by the expert.

[d] No events were coded for this category by either the expert or the observer.

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TABLE 20

Summary of the Category Marginal, Overall Marginal and Cohen's Kappa Observer Agreement Coefficients for the DMP and WDRSD Observers with the Expert Observers

Retraining Session: March 16 and 17, 1978

Interactions

Observer Pair Obs[a]	Expert	Curriculum and Grade	Total Events Observed	Category Marginal			Overall Marginal	Cohen's Kappa κ
				Target to Student	Teacher to Group	None of the above		
				Thursday, March 16, 1978				
10	90	DMP 5	90	.57 (7)[c]	.00 (0)	.95 (79)	.57	.40
20	90	DMP 5	90	.50 (7)	.00 (0)	.98 (79)	.47	.46
30	80	DMP 5	–[b]					
40	80	DMP 5	90	.50 (2)	.81 (13)	.93 (70)	.54	.54
10	90	WDRSD 2	66	.50 (2)	.97 (28)	.91 (32)	.58	.54
20	90	WDRSD 2	66	.40 (2)	.71 (28)	.89 (32)	.46	.40
30	80	WDRSD 2	–					
40	80	WDRSD 2	60	1.00 (1)	.57 (8)	.86 (43)	.70	.58
10	90	DMP 2	84	.60 (5)	1.00 (2)	.97 (73)	.60	.46
20	90	DMP 2	84	.83 (5)	.50 (2)	.96 (73)	.38	.54
30	80	DMP 2	–					
40	80	DMP 2	78	.18 (2)	.75 (9)	.82 (61)	.57	.30
	Mean			.56	.59	.92	.54	.47
				Friday, March 17, 1978				
10	90	DMP 5	90	.00 (1)	–[d] (0)	.97 (86)	.19	-.01
20	90	DMP 5	90	.00 (1)	– (0)	.98 (86)	.30	.32
30	80	DMP 5	90	.12 (1)	.75 (12)	.92 (72)	.38	.36
40	80	DMP 5	90	.25 (1)	.54 (12)	.78 (72)	.50	.36
10	90	WDRSD 2	66	.43 (3)	.80 (12)	.81 (48)	.38	.42
20	90	WDRSD 2	66	.50 (3)	.86 (12)	.94 (48)	.38	.54
30	80	WDRSD 2	60	.50 (2)	.30 (10)	.90 (45)	.74	.45
40	80	WDRSD 2	60	1.00 (2)	.90 (10)	.98 (45)	.65	.54
10	90	DMP 2	84	.00 (0)	.80 (4)	.99 (75)	.47	.49
20	90	DMP 2	84	.00 (0)	.75 (4)	.99 (75)	.42	.44
30	80	DMP 2	84	.50 (2)	1.00 (9)	.97 (68)	.35	.32
40	80	DMP 2	84	1.00 (2)	1.00 (9)	1.00 (68)	.54	.42
	Mean			.36	.77	.94	.44	.39

[a] Observers 10 and 20 observed at WDRSD schools.
Observers 30 and 40 observed at DMP schools.

[b] Observer 30 did not attend first day of retraining session.

[c] Events coded by the expert.

[d] No events were coded for this category by either the expert or the observer.

TABLE 21

Summary of Means of the Category Marginal for Each Day of the WDRSD and DMP Training and Retraining Session

Observation Category	Training		Retraining	
	Thursday	Friday	Thursday	Friday
Self Paced	.94	.80	.90	.87
Other Paced	.85	.83	.70	.82
Individual	.84	.82	.83	.88
Pair	.64	.53	.60	.76
Small Group	.70	.40	.35	.44
Large Group	.84	.66	.78	.77
Paper/pencil	.94	.80	.88	.92
Manipulatives	.75	.72	.19	.49
Games	-	.24	.00	.39
Audio Visual	-	.00	-	.00
Printed Material	.36	.26	.76	.33
Other Material	-	-	.95	.48
Engaged-Written	.78	.65	.92	.78
Engaged-Oral	.39	.35	.67	.74
Engaged-Covert	.82	.83	.86	.81
Non-engaged Interim	.76	.46	.63	.58
Non-engaged Waiting	.49	.84	.58	.58
Non-engaged Off-task	.72	.73	.80	.72
Target to Student	.67	.61	.56	.36
Teacher to Group	.77	.45	.59	.77

TABLE 22

Summary of Means of the Cohen's Kappa
for Sets of Categories By Day for the
WDRSD and DMP Training and Retraining Sessions

Observation Category Set	Training		Retraining	
	Thursday	Friday	Thursday	Friday
Pacing	.76	.66	.65	.76
Grouping	.74	.64	.67	.74
Paper/pencil	.70	.65	.74	.75
Manipulatives	.68	.62	.44	.63
Game	-	.54	.50	.51
Audio Visual	-	.83	-	.82
Printed Material	.59	.57	.73	.69
Other Material	-	-	.81	.77
Learner Moves	.51	.52	.59	.56
Interactions	.51	.38	.47	.39

TABLE 23

Summary of Generalizability Coefficients For
Observer by Class by Day for the
WDRSD and DMP Retraining Session

Observation Category	Observer Group	
	10 x 20 x 90	40 x 80
General Content	.00	.96
Self Paced	1.00	1.00
Other Paced	.99	.99
Individual	1.00	.99
Pair	.34	.74
Small Group	.88	.98
Large Group	.98	1.00
Paper/pencil	.99	.96
Engaged Written	.94	.81
Engaged Oral	.12	.00
Engaged Covert	.95	.60
Total Engagement	.46	.86
Non-engaged Interim	.98	.63
Non-engaged Waiting	.96	.99
Non-engaged Off Task	.94	.76
Total Non-engagement	.98	.96

On-Site Visits

The summary of the agreement coefficients from the on-site visits to each of the four schools are given in Tables 24 through 27. Listed for each category where at least one event was coded by an observer is the marginal agreement. Then for the each set of categories, the category marginal agreements and Cohen's κ are listed. The contingency tables showing the frequencies for each category for the on-site visits are in Appendix C.

On-site visits were made to each school by one of the Phase IV staff members as soon as possible after the training session. The purpose of these visits was to check on the observer's facility in using the observation system and to discuss specific questions that may have arisen after the observer had done some observations at his or her school. This first on-site visit was considered as a part of the training procedures. A second on-site visit was made to three of the schools after the retraining session. This visit was made to check on the observer agreement after the observer was familiar with the system and had done several observations. A second on-site visit was not made at School 440 because observer 40 had always shown a high degree of facility in using the system and it was difficult to arrange a time for one of the experts to visit the school. For each visit, observations were generally made at both Grades 2 and 5. Sometimes this was impossible and only one grade level was observed. The retraining session was during week 9. The first tests were administered during week 1 so that the first observations were done during week 2. Thus on-site visits during weeks 2 through 8 were done before the retraining sessions. Visits made during weeks 10 through 16 were made after the retraining session.

School 452 (Observer 10). For the on-site visit during week 5, the marginal agreements for General Content and pacing are high, generally above .80. The coefficients for the grouping are reasonably high except for pair and small group which both occurred very infrequently. The only material observed being used was paper/pencil which was coded with agreement for grade 5 (.96) but with lower agreement for grade 2 (.60). The high category coefficients for paper and pencil materials at grade 2 indicate that there was high agreement when paper/pencil materials were not in use. There was some disagreement on the learner move categories indicating that the observer still had not gained adequate facility in distinguishing among the categories. There was relatively high agreement in coding when students were engaged (.95 and .74) and non-engaged (.87 and .73). For grade 2 the agreements for the teacher to group and for no interactions are high. However, for grade 5 these are much lower indicating the observer still lacked some facility in coding interactions consistently.

The category Cohen's κ for grade 2 for week 5 are all relatively high (above .73). This indicates that even though there was low agreement on some of the individual categories within a set (e.g. pair, small group, and engaged-oral) these did not occur very frequently and that the observers agreed in coding many of the events. The Cohen's κ's for grade 5 were

TABLE 24

Observer Agreement Coefficients for
On-Site Visits to WDRSD School 452
Observers 10 and 90

Categories	Grade 2			Grade 5			Grade 2		
	Week 5 Day 3			Week 5 Day 3			Week 15 Day 5		
	(Total Events 72)			(Total Events 66)			(Total Events 72)		
	Marginal Agreement	Category Agreement	Cohen's Kappa κ	Marginal Agreement	Category Agreement	Cohen's Kappa κ	Marginal Agreement	Category Agreement	Cohen's Kappa κ
General Content	.86 (18)[a]	.80	.90	.75 (4)	.75	.85	1.00 (27)	.89	.98
Self Paced	.86 (6)	.88	.83	1.00 (14)	.91	.56	.88 (14)	.94	.91
Other Paced	.87 (31)			.98 (48)			.94 (31)		
Individual	1.00 (6)	.68	.84	.77 (10)	.62	.68	.62 (8)	.79	.77
Pair	.50 (2)			.00 (0)			.90 (10)		
Small Group	.00 (1)			-			.50 (6)		
Large Group	.96 (28)			.94 (52)			.95 (21)		
Paper/pencil	.60 (10)	.83	.86	.96 (47)	.88	.93	.96 (24)	.97	.98
Manipulatives	-			-			-		
Games	-			-			-		
Audio-Visual	-			-			-		
Printed Materials	-			-			.00 (2)	.65	.94
Other Materials	-			-			-		
Engaged-written	.17 (6)	.50	.73	.40 (10)	.66	.40	.88 (8)	.80	.77
Engaged-oral	.00 (0)			-			1.00 (3)		
Engaged-covert	.89 (16)			.54 (19)			.96 (24)		
Total Engagement	.95 (22)			.74 (29)			.94 (35)		
Non-engaged interim	.50 (3)			1.00 (3)			1.00 (2)		
Non-engaged waiting	.00 (5)			.48 (21)			.40 (5)		
Non-engaged off-task	1.00 (7)			.82 (9)			.38 (3)		
Total Non-engagement	.87 (15)			.73 (33)			.83 (10)		
Target to student	.00 (0)	.44	.73	.00 (1)	.30	.36	.00 (0)	.38	.61
Teacher to group	.86 (7)			.38 (29)			.88 (14)		
No Interactions	.98 (59)			.67 (31			.94 (52)		

[a] Events coded by the expert.

generally lower, particularly for pacing (.56), grouping (.68), learner moves (.40) and for interactions (.36). Thus the observer at this point had not yet gained the expected facility in using the system consistently. The coding of these two classes were discussed in detail during the on-site visit.

The agreement coefficients were generally higher in coding grade 2 during week 15. Only individual, small group, non-engaged waiting and non-engaged off-task have low marginal coefficients. The Cohen's κ's for four of the sets of categories are extremely high (above .90) and for the other three sets of categories are moderately high (above .60). Thus the ability of Observer 10 had improved after using the system and had reached an acceptable level in coding most of the categories.

School 504 (Observer 20). The marginal agreement coefficients for Observer 20 (Table 25) were high except for the learner move categories. Observer 20 had difficulty in distinguishing between engaged-covert and non-engaged waiting. This resulted in a low agreement coefficient for each of the categories and for total engagement and total non-engagement. The Cohen's κ also reflect a high facility in coding all the sets of categories except for learner moves (κ = .47).

Observer 20 had maintained her ability in coding the categories other than learner moves and also had improved greatly in coding learner moves by the time of the on-site visit after the retraining session, week 15. The marginal agreement coefficients, with the exception of a few with low frequencies, are high for both grade levels. The Cohen's κ's are all high

TABLE 25

Observer Agreement Coefficients for On-Site Visits to WDRSD School 504 Observers 20 and 90

Categories	Grade 2 Week 4 Day 1 (Total Events 54)			Grade 2 Week 15 Day 2 (Total Events 54)			Grade 5 Week 15 Day 2 (Total Events 138)		
	Marginal Agreement	Category Agreement	Cohen's Kappa κ	Marginal Agreement	Category Agreement	Cohen's Kappa κ	Marginal Agreement	Category Agreement	Cohen's Kappa κ
General Content	.88 (8)[a]	.74	.93	1.00 (10)	1.00	1.00	1.00 (22)	1.00	1.00
Self Paced	.74 (14)	.83	.81	.92 (11)	.96	.97	.95 (88)	.65	.92
Other Paced	.88 (32)			.97 (33)			.00 (5)		
Individual	.89 (16)	.67	.81	.90 (9)	.78	.90	.99 (82)	.97	.96
Pair	.00 (0)			1.00			.91 (10)		
Small Group	-			.00 (1)			1.00 (1)		
Large Group	.93 (30)			1.00 (32)			-		
Paper/pencil	.94 (29)	.92	.90	1.00 (12)	1.00	1.00	.89 (42)	.93	.84
Manipulatives	-			-			-		
Games	-			-			-		
Audio-Visual	-			-			-		
Printed Materials	-			1.00 (4)	1.00	1.00	.87 (71)	.86	.85
Other Materials	-			1.00 (4)	1.00	1.00	.00 (1)	.66	.98
Engaged-written	.80 (8)	.75	.47	.67 (2)	.77	.70	.68 (15)	.71	.84
Engaged-oral	1.00 (1)			.50 (2)			.00 (0)		
Engaged-covert	.59 (13)			1.00 (18)			.85 (52)		
Total Engagement	.67 (22)			1.00 (22)			.97 (67)		
Non-engaged interim	.50 (1)			.57 (7)			.91 (10)		
Non-engaged waiting	.50 (22)			.80 (8)			-		
Non-engaged off-task	1.00 (1)			.88 (7)			.81 (16)		
Total Non-engagement	.58 (24)			1.00 (22)			.92 (26)		
Target to student	.00 (0)	.74	.93	1.00 (1)	.71	.65	.00 (0)	.20	.33
Teacher to group	.80 (8)			.87 (13)			-		
No Interactions	.96 (45)			.97 (39)			1.00 (135)		

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[a] Events coded by the expert.

(above .70) except for interactions where there was some disagreement as to what the interaction was on a very small number of events. There was extremely high agreement when there were no interactions. Thus Observer 20 had gained a very high level of facility in using the system.

School 433 (Observer 30). Observer 30 was having more difficulty with the observation system (Table 26) by week 4 than did the other three observers. There is some question about the meaning of these coefficients for this on-site visit since early in the morning the observer's apartment was destroyed by fire which caused some distraction to the observer. The observer did have a misconception of individual grouping. Even though students were working by themselves on worksheets, the observer coded this as a large group activity since all the students were doing the same worksheet. This misinterpretation of grouping was discussed during the visit. By week 16 the observer had gained a high level of facility in using the system as indicated by the high marginal coefficients for most categories. Those categories with low coefficients were only those coded very infrequently by the expert observer. The Cohen's κ for the materials categories of games, printed materials and other do not have much meaning since these categories were observed so infrequently.

School 440 (Observer 40). With the exception of learner moves, the agreement coefficients for Observer 40 are extremely high (Table 27) for the on-site visit during week 4. Observer 40 had some difficulty in distinguishing among engaged-covert and the other learner moves. She was not

TABLE 26

Observer Agreement Coefficients for
On-site Visits to DMP School 433
Observers 30 and 80

Categories	Grade 2 Week 4 Day 4 (Total Events 54) Marginal Agreement	Category Agreement	Cohen's Kappa κ	Grade 5 Week 16 Day 2 (Total Events 96) Marginal Agreement	Category Agreement	Cohen's Kappa κ
General Content	.67 (2)[a]	.82	.79	.60 (5)	.37	.48
Self Paced	.04 (1)	.42	.15	1.00 (21)	.86	.87
Other Paced	.55 (51)			.97 (70)		
Individual	.04 (1)	.42	.15	.90 (19)	.80	.88
Pair	- (0)			.50 (2)		
Small Group	- (0)			1.00 (2)		
Large Group	.55 (51)			.99 (68)		
Paper/pencil	.98 (52)	.82	.79	1.00 (41)	.85	.90
Manipulatives	-			-		
Games	-			.67 (2)	.75	.68
Audio Visual	-			.00	.52	.42
Printed Materials	-			-		
Other Materials	-			.00 (1)	.53	.42
Engaged-Written	.94 (17)	.60	.54	.75 (12)	.76	.65
Engaged-Oral	.50 (2)			.25 (1)		
Engaged-Covert	.57 (21)			.94 (47)		
Total Engagement	.78 (40)			.94 (60)		
Non-engaged Interim	.67 (3)			1.00 (5)		
Non-engaged Waiting	.61 (8)			1.00 (18)		
Non-engaged Off Task	.20 (1)			.75 (8)		
Total Non-engagement	.60 (12)			.94 (31)		
Target to Student	-	.65	.46	.40 (2)	.44	.60
Teacher to Group	.58 (12)			.82 (27)		
No Interactions	.95 (40)			.97 (66)		

a Events coded by the expert.

b No events coded by either the observer or the expert.

TABLE 27

Observer Agreement Coefficients on Observation Categories for On-Site Visit for DMP School 440
Observers 40 and 80

Categories	Grade 5		
	Week 4 Day 4 (Total Events 96)		
	Marginal Agreement	Category Marginal	Cohen's Kappa κ
General Content	1.00 (9)[a]	1.00	1.00
Self Paced	.99 (77)	.96	.97
Other Paced	.91 (10)		
Individual	.99 (77)	.96	.97
Pair	-		
Small Group	-		
Large Group	.91 (10)		
Paper/Pencil	.95 (73)	.89	.77
Manipulatives	-		
Games	-		
Audio Visual	-		
Printed Materials	.94 (17)	.98	.98
Other Materials	1.00 (1)	1.00	1.00
Engaged-Written	.79 (34)	.56	.66
Engaged-Oral	.00 (0)		
Engaged-Covert	.38 (26)		
Total Engagement	.92 (60)		
Non-engaged Interim	.50 (2)		
Non-engaged Waiting	.46 (6)		
Non-engaged Off-task	.79 (19)		
Total Non-engagement	.84 (27)		
Target to Student	.00 (2)	.49	.63
Teacher to Group	-		
No interactions	.96 (84)		

[a] Events coded by the expert.

as specific on whether or not the student was actually writing or only was reading the problem with a pencil in hand. This caused some disagreement on these specific categories, however agreement on total engagement (.92) and total non-engagement (.84) was high. The Cohen's κ's for the sets of categories were extremely high for general content (1.00), pacing (.97), grouping (.97), printed materials (.98) and other materials (1.00). The Cohen's κ's were moderately high for the other categories - paper/pencil (.77), learner moves (.66), and interactions (.63).

On-site visits Summary. The results of the on-site visits indicate that the observers still had difficulty in coding some categories after the training session. The coding of learner moves seems to require more time than was given in the training session for observers to gain facility in distinguishing among the categories. The observers could, however, generally distinguish whether or not students were engaged. All of the observers had reached a high degree of facility in using the system by the time of the second period, after the retraining session.

VI

Conclusions

The observation categories that had high interobserver agreements for the training session, retraining sessions, and on-site visits are:

Self-paced
Other-paced
Individual
Large Group
Paper/pencil
Engaged-written
Engaged-covert
Non-engaged off-task

For the other categories where there were lower interobserver agreements, most of these categories occurred very infrequently. Interobserver agreement was relatively high in coding pairs and small groups of students that were formally designated by the teacher. Disagreement occurred when there were occasional pairs and small groups formed to have a question answered and only existed for a short period of time. Thus pair and small group time should be interpreted as time spent in these groupings as directed by the teacher and for a measurable amount of time of the class period.

Material categories other than paper/pencil occurred very infrequently. There was high agreement that these materials were not used, but the lower agreement on when these materials were used reflects the low frequencies of occurrence of the different types of materials in the classes observed. The most important agreement on the material category is the high agreement that the materials were not used.

Three learner moves (engaged-oral, non-engaged interim and non-engaged waiting) had low interobserver agreements. Students were rarely engaged in talking. Thus there were very few instances of engaged-oral for the observers to reach agreement. However, there was improvement on this category from the training session to the retraining session. Non-engaged interim is a more nebulous category which the low interobserver agreements on this category reflect. Non-engaged waiting also appears to be less well defined as reflected by the low interobserver agreements. However, when the three engaged categories and the three non-engaged cagegories are combined into two groups, total engagement and total non-engagement, the agreement is generally high as reflected by the generalizability coefficients for the retraining session.

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APPENDIX A

Contingency Tables for each set of Observation Categories
for Pairs of Observers for the WDRSD and DMP Training Session
(January 10-13 1978)

Appendix A

Included in this appendix are:

Tables	28 - 47	General Content
Tables	48 - 67	Pace
Tables	68 - 87	Grouping
Tables	88 - 107	Paper/Pencil
Tables	108 - 118	Manipulatives
Tables	119 - 122	Games
Tables	123 - 124	Audio Visual Aids
Tables	125 - 136	Printed Materials
Tables	137 - 156	Learner Moves
Tables	157 - 176	Interactions

Table 28

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	0	0	0	0	0	0	0	-----	-----	-----
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	54	54	1.000	1.000	-----
Marginal Totals		0	0	0	0	0	0	54	54			

Category Marginal Agreement: 1.000

Cohen's Kappa: -----

Table 29

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	0	0	0	0	0	0	0	0	-----	0.000	-----
Transition	2	0	0	0	0	0	0	0	0	-----	-----	-----
Management	3	0	0	0	0	0	0	0	0	-----	0.000	-----
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	1	0	1	1	0	0	51	54	.944	.944	0.000
Marginal Totals		1	0	1	1	0	0	51	54			

Category Marginal Agreement: .236

Cohen's Kappa: 0.000

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Table 30

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	2	0	0	0	0	0	1	3	.667	.667	.655
Transition	2	0	4	0	0	0	0	2	6	.667	.667	.643
Management	3	0	0	1	0	0	0	1	2	.500	.500	.492
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	1	0	0	48	49	.980	.942	.847
Marginal Totals		2	4	1	1	0	0	52	60			

Category Marginal Agreement: .555

Cohen's Kappa: .706

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Table 31

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40   Expert 80
School 801   Grade 2
Week 0   Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	2	0	0	0	0	0	1	3	.667	.667	.655
Transition	2	0	6	0	0	0	0	0	6	1.000	1.000	1.000
Management	3	0	0	0	0	0	0	2	2	0.000	0.000	0.000
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	1	0	0	48	49	.980	.961	.864
Marginal Totals		2	6	0	1	0	0	51	60			

Category Marginal Agreement: .525

Cohen's Kappa: .773

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Table 32

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	3	2	0	0	0	0	0	5	.600	1,000	,575
Transition	2	1	5	1	0	0	0	2	9	.556	,778	,515
Management	3	1	0	3	0	0	0	1	5	.600	,800	,580
Break	4	0	0	0	0	0	0	0	0	-----	0,000	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	2	0	0	63	65	.969	,985	,856
Marginal Totals		5	7	4	2	0	0	66	84			

Category Marginal Agreement: .713

Cohen's Kappa: .684

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Table 33

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20   Expert 80
School 801   Grade 2
Week 0   Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	3	1	1	0	0	0	0	5	.600	.600	.585
Transition	2	0	6	0	0	0	0	3	9	.667	.889	.632
Management	3	0	1	4	0	0	0	0	5	.800	1.000	.787
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	1	0	0	64	65	.985	.970	.924
Marginal Totals		3	8	5	1	0	0	67	84			

Category Marginal Agreement: .692

Cohen's Kappa: .773

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Table 34

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30 Expert 90
School 801 Grade 5
Week 0 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	0	0	0	0	0	0	0	0	-----	0.000	-----
Transition	2	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Management	3	1	0	0	0	0	0	0	1	0.000	0.000	0.000
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	0	0	0	3	3	0.000	0.000	0.000
Other Academic	6	0	0	0	2	0	0	0	2	0.000	0.000	0.000
None of the Above	7	4	0	0	0	0	0	67	71	.944	1.000	.378
Marginal Totals		5	0	0	2	0	0	71	78			

Category Marginal Agreement: .143

Cohen's Kappa: .177

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Table 35

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40 Expert 90
School 801 Grade 5
Week 0 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40: 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	1	0	0	0	0	0	1	1.000	1.000	1.000
Management	3	0	0	1	0	0	0	0	1	1.000	1.000	1.000
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	3	0	0	0	3	0.000	0.000	0.000
Other Academic	6	0	0	0	2	0	0	0	2	0.000	0.000	0.000
None of the Above	7	0	0	0	0	0	0	71	71	1.000	1.000	1.000
Marginal Totals		0	1	1	5	0	0	71	78			

Category Marginal Agreement: .500

Cohen's Kappa: .625

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Table 36

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	1	0	0	0	0	0	0	1	1.000	1.000	1.000
Transition	2	0	1	1	0	0	0	0	2	.500	.500	.483
Management	3	0	0	0	0	0	0	0	0	-----	0.000	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	1	0	0	0	26	27	.963	.963	.722
Marginal Totals		1	1	2	0	0	0	26	30			

Category Marginal Agreement: .616

Cohen's Kappa: .692

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Table 37

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Transition	2	0	2	0	0	0	0	0	2	1.000	1.000	1.000
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	27	27	1.000	.964	1.000
Marginal Totals		0	2	0	0	0	0	28	30			

Category Marginal Agreement: .658

Cohen's Kappa: .766

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Table 38

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	1	0	0	0	1	0	0	2	,500	,500	,483
Transition	2	0	0	0	0	0	0	0	0	-----	0,000	-----
Management	3	0	0	1	0	0	0	0	1	1,000	1,000	1,000
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	0,000	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	3	0	0	0	0	24	27	,889	,889	,444
Marginal Totals		1	3	1	0	1	0	24	30			

Category Marginal Agreement: ,478

Cohen's Kappa: ,518

Table 39

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	1	0	0	0	0	0	1	2	.500	.500	.483
Transition	2	0	0	0	0	0	0	0	0	-----	-----	-----
Management	3	0	0	1	0	0	0	0	1	1.000	1.000	1.000
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	27	27	1.000	.964	1.000
Marginal Totals		1	0	1	0	0	0	28	30			

Category Marginal Agreement: .821

Cohen's Kappa: .787

Table 40

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10   Expert 90
School 801   Grade 2
Week 0   Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	1	0	0	0	0	0	1	1.000	.500	1.000
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	1	0	0	0	0	52	53	.981	.981	.491
Marginal Totals		0	2	0	0	0	0	52	54			

Category Marginal Agreement: .741

Cohen's Kappa: .658

Table 41

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1976

Reliability on General Content
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	0	0	0	0	0	1	1	0.000	1.000	-.019
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	1	0	0	0	0	52	53	.981	1.000	-.019
Marginal Totals		0	1	0	0	0	0	53	54			

Category Marginal Agreement: 1.000

Cohen's Kappa: -.019

Table 42

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	0.000	-----
Transition	2	0	1	0	0	0	0	0	1	1.000	1.000	1.000
Management	3	0	0	2	0	0	0	1	3	.667	.667	.654
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	1	0	0	0	1	0.000	0.000	0.000
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	3	0	0	0	0	0	46	49	.939	.959	.828
Marginal Totals		3	1	2	1	0	0	47	54			

Category Marginal Agreement: .438

Cohen's Kappa: .554

Table 43

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	1	0	0	0	0	0	1	1.000	1.000	1.000
Management	3	0	0	3	0	0	0	0	3	1.000	1.000	1.000
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	1	0	0	0	1	0.000	0.000	0.000
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	49	49	1.000	1.000	1.000
Marginal Totals		0	1	3	1	0	0	49	54			

Category Marginal Agreement: .600

Cohen's Kappa: .893

Table 44

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10   Expert 80
School 801   Grade 2
Week 0   Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	2	0	1	0	0	0	0	3	.667	.667	.658
Transition	2	0	0	0	0	0	0	0	0	-----	-----	-----
Management	3	0	0	0	0	0	0	2	2	0.000	.333	-.083
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	5	0	0	0	68	73	.932	.959	.332
Marginal Totals		2	0	6	0	0	0	70	78			

Category Marginal Agreement: .683

Cohen's Kappa: .347

Table 45

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20   Expert 80
School 801   Grade 2
Week 0   Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	2	0	0	0	0	0	1	3	.667	1.000	.653
Transition	2	0	0	0	0	0	0	0	0	-----	-----	-----
Management	3	0	0	0	0	0	0	2	2	0.000	0.000	0.000
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	1	0	0	0	0	0	72	73	.986	.973	.644
Marginal Totals		3	0	0	0	0	0	75	78			

Category Marginal Agreement: .658

Cohen's Kappa: .480

Table 46

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30   Expert 90
School 801   Grade 2
Week 0   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	2	0	0	0	0	0	0	2	1.000	.400	1.000
Transition	2	0	2	0	0	0	0	2	4	.500	.750	.481
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	1	0	0	1	0	0	0	2	.500	.500	.494
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	2	1	0	0	0	0	73	76	.961	.987	.632
Marginal Totals		5	3	0	1	0	0	75	84			

Category Marginal Agreement: .659

Cohen's Kappa: .622

Table 47

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	2	0	0	0	0	0	0	2	1.000	.667	1.000
Transition	2	0	2	0	0	0	0	2	4	.500	.500	.488
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	1	0	0	1	0	0	0	2	.500	.500	.494
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	76	76	1.000	.974	1.000
Marginal Totals		3	2	0	1	0	0	78	84			

Category Marginal Agreement: .660

Cohen's Kappa: .773

Table 48

```
                        Phase IV - IGE Evaluation Project
                        Descriptive Study - Spring 1978

                              Reliability on Pace
                            Observer 10   Expert 90
                            School 801    Grade 2
                              Week  0     Day 4
                                     WDRSD


                         Category chosen
                         by Observer 10                                                  Light's
Category chosen      Cat.                         Marginal     Nominal     Marginal     Extension
 by Expert 90          #      1      2      3      Totals     Agreement    Agreement    of Kappa

                         ++++++++++++++++++++++++++++
                         +                    +        +
    Self               1 +   30      0      0 +   30   +      1.000         .857        1.000
                         +                    +        +
    Other              2 +    5     19      0 +   24   +       .792         .792         .679
                         +                    +        +
    Neither            3 +    0      0      0 +    0   +      -----        -----        -----
                         +                    +        +
                         ++++++++++++++++++++++++++++
                         +                    +        +
         Marginal Totals +   35     19      0 +   54   +
                         +                    +        +
                         ++++++++++++++++++++++++++++


                      Category Marginal Agreement:  .824

                            Cohen's Kappa:  .809
```

Table 49

```
                       Phase IV - IGE Evaluation Project
                       Descriptive Study - Spring 1978

                            Reliability on Pace
                          Observer 20   Expert 90
                          School 801    Grade 2
                             Week  0    Day 4
                                  WDRSD


                     Category chosen
                     by Observer 20                                               Light's
Category chosen         Cat.                     Marginal   Nominal    Marginal    Extension
 by Expert 90             #     1    2    3       Totals   Agreement  Agreement    of Kappa

                          ++++++++++++++++++++++++++++
                          +                  +        +
     Self               1 +    27    2    1  +   30   +    .900       .938         .755
                          +                  +        +
     Other              2 +     5   17    2  +   24   +    .708       .792         .550
                          +                  +        +
     Neither            3 +     0    0    0  +    0   +    -----      0.000        -----
                          +                  +        +
                          ++++++++++++++++++++++++++++
                          +                  +        +
         Marginal Totals  +    32   19    3  +   54   +
                          +                  +        +
                          ++++++++++++++++++++++++++++


                       Category Marginal Agreement:  .576

                            Cohen's Kappa:  .640
```

Table 50

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 30   Expert 80
School 801   Grade 2
Week 0   Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	33	0	1	34	.971	1.000	.932
Other	2	0	15	0	15	1.000	.833	1.000
Neither	3	1	3	7	11	.636	.727	.580
Marginal Totals		34	18	8	60			

Category Marginal Agreement: .854

Cohen's Kappa: .856

Table 51

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                         Phase IV - IGE Evaluation Project
                         Descriptive Study - Spring 1978

                              Reliability on Pace
                           Observer 40   Expert 80
                            School 801   Grade 2
                              Week  0    Day 4
                                    WDRSD


                         Category chosen
                         by Observer 40                                          Light's
Category chosen     Cat.                      Marginal    Nominal    Marginal    Extension
 by Expert 80         #     1     2     3      Totals    Agreement   Agreement   of Kappa

                       +++++++++++++++++++++++++++
                       +                  +        +
    Self             1 +   33     0     1  +   34   +     .971       1.000         .932
                       +                  +        +
    Other            2 +    0    15     0  +   15   +    1.000        .882        1.000
                       +                  +        +
    Neither          3 +    1     2     8  +   11   +     .727        .818         .679
                       +                  +        +
                       +++++++++++++++++++++++++++
                       +                  +        +
      Marginal Totals  +   34    17     9  +   60   +
                       +                  +        +
                       +++++++++++++++++++++++++++


                 Category Marginal Agreement:  .900

                         Cohen's Kappa:  .885
```

Table 52

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10 Expert 80
School 801 Grade 2
Week 0 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	27	5	2	34	.794	.941	.667
Other	2	4	27	0	31	.871	.939	.787
Neither	3	1	1	17	19	.895	1.000	.864
Marginal Totals		32	33	19	84			

Category Marginal Agreement: .960

Cohen's Kappa: .762

Table 53

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20 Expert 80
School 801 Grade 2
Week 6 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	30	3	1	34	.882	.895	.785
Other	2	7	24	0	31	.774	.871	.667
Neither	3	1	0	18	19	.947	1.000	.932
Marginal Totals		38	27	19	84			

Category Marginal Agreement: .922

Cohen's Kappa: .779

Table 54

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 30 Expert 90
School 801 Grade 2
Week 0 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	46	1	1	48	.958	.857	.852
Other	2	5	14	3	22	.636	.682	.550
Neither	3	5	0	3	8	.375	.875	.313
Marginal Totals		56	15	7	78			

Category Marginal Agreement: .805

Cohen's Kappa: .611

Table 55

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 40 Expert 90
School 801 Grade 2
Week 0 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	44	4	0	48	.917	.980	.776
Other	2	4	18	0	22	.818	1.000	.747
Neither	3	1	0	7	8	.875	.875	.863
Marginal Totals		49	22	7	78			

Category Marginal Agreement: .952

Cohen's Kappa: .780

Table 56

```
                        Phase IV - IGE Evaluation Project
                        Descriptive Study - Spring 1978

                             Reliability on Pace
                          Observer 10    Expert 90
                           School 801    Grade 5
                              Week  0    Day 5
                                     DMP


                      Category chosen
                      by Observer 10                                      Light's
Category chosen    Cat.                      Marginal    Nominal    Marginal    Extension
by Expert 90         #     1    2    3       Totals     Agreement  Agreement   of Kappa

                       ++++++++++++++++++++++++++++++
                       +                   +        +
    Self             1 +  25    0    2     +   27   +    .926       .926        .556
                       +                   +        +
    Other            2 +   0    0    0     +    0   +    -----      -----       -----
                       +                   +        +
    Neither          3 +   0    0    3     +    3   +   1.000       .600       1.000
                       +                   +        +
                       ++++++++++++++++++++++++++++++
                       +                   +        +
        Marginal Totals +  25    0    5     +   30   +
                       +                   +        +
                       ++++++++++++++++++++++++++++++


                      Category Marginal Agreement:  .763

                             Cohen's Kappa:  .714
```

Table 57

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20   Expert 90
School 801   Grade 5
Week 0   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	27	0	0	27	1.000	.964	1.000
Other	2	0	0	0	0	-----	-----	-----
Neither	3	1	0	2	3	.667	.667	.643
Marginal Totals		28	0	2	30			

Category Marginal Agreement: .815

Cohen's Kappa: .783

Table 58

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 30 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	11	0	0	11	1.000	1.000	1.000
Other	2	0	12	0	12	1.000	1.000	1.000
Neither	3	0	0	7	7	1.000	1.000	1.000
Marginal Totals		11	12	7	30			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 59

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 40   Expert 80
School 801   Grade 5
Week 0   Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	11	0	0	11	1.000	1.000	1.000
Other	2	0	12	0	12	1.000	.923	1.000
Neither	3	0	1	6	7	.857	.857	.821
Marginal Totals		11	13	6	30			

Category Marginal Agreement: .927

Cohen's Kappa: .948

Table 60

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	0	5	1	6	0.000	0.000	0.000
Other	2	0	46	1	47	.979	.922	.617
Neither	3	0	0	1	1	1.000	.333	1.000
Marginal Totals		0	51	3	54			

Category Marginal Agreement: .418

Cohen's Kappa: .267

Table 61

```
                         Phase IV - IGE Evaluation Project
                         Descriptive Study - Spring 1978

                               Reliability on Pace
                            Observer 20   Expert 90
                            School 801    Grade 2
                              Week  0     Day 5
                                      WDRSD


                          Category chosen
                          by Observer 20                                                   Light's
Category chosen        Cat.                      Marginal   Nominal     Marginal    Extension
 by Expert 90           #      1    2    3        Totals   Agreement   Agreement   of Kappa

                        ++++++++++++++++++++++++++++
                        +                  +        +
    Self              1 +      0    5    1 +      6 +    0.000       0.000        0.000
                        +                  +        +
    Other             2 +      0   45    2 +     47 +     .957        .922         .234
                        +                  +        +
    Neither           3 +      0    1    0 +      1 +    0.000        .333        -.059
                        +                  +        +
                        ++++++++++++++++++++++++++++
                        +                  +        +
       Marginal Totals  +      0   51    3 +     54 +
                        +                  +        +
                        ++++++++++++++++++++++++++++


                    Category Marginal Agreement:  .418

                          Cohen's Kappa:  .058
```

Table 62

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	41	4	2	47	.872	.894	.426
Other	2	0	0	2	2	0.000	.400	-.102
Neither	3	1	1	3	5	.600	.714	.540
Marginal Totals		42	5	7	54			

Category Marginal Agreement: .669

Cohen's Kappa: .398

Table 63

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	47	0	0	47	1.000	1.000	1.000
Other	2	0	2	0	2	1.000	1.000	1.000
Neither	3	0	0	5	5	1.000	1.000	1.000
Marginal Totals		47	2	5	54			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 64

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10 Expert 80
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	31	1	0	32	.969	.969	.948
Other	2	0	36	5	41	.878	.951	.756
Neither	3	0	2	3	5	.600	.625	.554
Marginal Totals		31	39	8	78			

Category Marginal Agreement: .848

Cohen's Kappa: .819

Table 65

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20 Expert 80
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	32	0	0	32	1.000	1.000	1.000
Other	2	0	39	2	41	.951	.976	.894
Neither	3	0	3	2	5	.400	.800	.368
Marginal Totals		32	42	4	78			

Category Marginal Agreement: .925

Cohen's Kappa: .882

Table 66

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 30 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	56	8	1	65	.862	.985	.418
Other	2	8	1	2	11	.091	.818	-.018
Neither	3	0	0	8	8	1.000	.727	1.000
Marginal Totals		64	9	11	84			

Category Marginal Agreement: .843

Cohen's Kappa: .411

Table 67

```
                          Phase IV - IGE Evaluation Project
                          Descriptive Study - Spring 1978

                                Reliability on Pace
                              Observer   40 Expert 90
                               School 801   Grade 2
                                 Week  0    Day 5
                                       DMP


                               Category chosen
                               by Observer 10                                    Light's
Category chosen        Cat.                        Marginal   Nominal    Marginal    Extension
 by Expert 90           #       1     2     3       Totals   Agreement  Agreement   of Kappa

                          ++++++++++++++++++++++++++++
                          +                   +        +
     Self               1 +    63     2     0 +   65   +    .969       .915        .801
                          +                   +        +
     Other              2 +     8     2     1 +   11   +    .182       .364        .141
                          +                   +        +
     Neither            3 +     0     0     8 +    8   +   1.000       .889       1.000
                          +                   +        +
                          ++++++++++++++++++++++++++++
                          +                   +        +
         Marginal Totals  +    71     4     9 +   84   +
                          +                   +        +
                          ++++++++++++++++++++++++++++


                          Category Marginal Agreement:  .723

                                 Cohen's Kappa:  .603
```

Table 68

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	20	0	0	0	0	20	1.000	.645	1.000
Pair	2	2	2	1	0	0	5	.400	.400	.377
Small Group (3-8)	3	5	0	7	1	0	13	.538	.615	.458
Large Group (>8)	4	4	0	0	12	0	16	.750	.813	.671
None of the above	5	0	0	0	0	0	0	-----	-----	-----
Marginal Totals		31	2	8	13	0	54			

Category Marginal Agreement: .618

Cohen's Kappa: .644

Table 69

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	19	0	0	0	1	20	.950	.741	.900
Pair	2	4	1	0	0	0	5	.200	.400	.169
Small Group (3-8)	3	1	1	10	0	1	13	.769	.769	.717
Large Group (>8)	4	3	0	0	12	1	16	.750	.750	.679
None of the above	5	0	0	0	0	0	0	-----	0.000	-----
Marginal Totals		27	2	10	12	3	54			

Category Marginal Agreement: .532

Cohen's Kappa: .683

Table 70

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	28	2	0	0	1	31	.903	.935	.813
Pair	2	0	3	0	0	0	3	1.000	.600	1.000
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	0	0	0	15	0	15	1.000	.833	1.000
None of the above	5	1	0	0	3	7	11	.636	.727	.580
Marginal Totals		29	5	0	18	8	60			

Category Marginal Agreement: .774

Cohen's Kappa: .820

Table 71

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	27	3	0	0	1	31	.871	.903	.758
Pair	2	0	3	0	0	0	3	1.000	.500	1.000
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	0	0	0	15	0	15	1.000	.882	1.000
None of the above	5	1	0	0	2	8	11	.727	.818	.679
Marginal Totals		28	6	0	17	9	60			

Category Marginal Agreement: .776

Cohen's Kappa: .822

Table 72

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	20	0	2	2	2	26	,769	,962	,671
Pair	2	2	6	0	1	0	9	,667	,667	,641
Small Group (3-8)	3	2	0	9	0	0	11	,818	1,000	,791
Large Group (>8)	4	0	0	0	19	0	19	1,000	,826	1,000
None of the above	5	1	0	0	1	17	19	,895	1,000	,864
Marginal Totals		25	6	11	23	19	84			

Category Marginal Agreement: ,891

Cohen's Kappa: ,799

Table 73

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20 Expert 80
School 801 Grade 2
Week 0 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	20	0	4	1	1	26	.769	.923	.677
Pair	2	1	7	1	0	0	9	.778	.778	.758
Small Group (3-8)	3	2	0	9	0	0	11	.818	.786	.782
Large Group (>8)	4	0	0	0	19	0	19	1.000	.950	1.000
None of the above	5	1	0	0	0	18	19	.947	1.000	.932
Marginal Totals		24	7	14	20	19	84			

Category Marginal Agreement: .887

Cohen's Kappa: .831

Table 74

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30 Expert 90
School 801 Grade 5
Week 0 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	36	1	0	0	1	38	.947	.745	.848
Pair	2	3	5	0	0	0	8	.625	.750	.594
Small Group (3-8)	3	7	0	6	1	0	14	.429	.429	.381
Large Group (>8)	4	0	0	0	7	3	10	.700	.800	.666
None of the above	5	5	0	0	0	3	8	.375	.875	.313
Marginal Totals		51	6	6	8	7	78			

Category Marginal Agreement: .720

Cohen's Kappa: .578

Table 75

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 90
School 801 Grade 5
Week 0 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	35	2	0	1	0	38	.921	.864	.819
Pair	2	2	6	0	0	0	8	.750	1.000	.721
Small Group (3-8)	3	6	0	8	0	0	14	.571	.571	.522
Large Group (>8)	4	0	0	0	10	0	10	1.000	.909	1.000
None of the above	5	1	0	0	0	7	8	.875	.875	.863
Marginal Totals		44	8	8	11	7	78			

Category Marginal Agreement: .844

Cohen's Kappa: .770

Table 76

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10 Expert 90
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	22	0	0	0	2	24	.917	1.000	.583
Pair	2	0	1	0	0	0	1	1.000	1.000	1.000
Small Group (3-8)	3	1	0	0	0	0	1	0.000	0.000	0.000
Large Group (>8)	4	1	0	0	0	0	1	0.000	0.000	0.000
None of the above	5	0	0	0	0	3	3	1.000	.600	1.000
Marginal Totals		24	1	0	0	5	30			

Category Marginal Agreement: .520

Cohen's Kappa: .610

Table 77

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20 Expert 90
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	24	0	0	0	0	24	1.000	.857	1.000
Pair	2	1	0	0	0	0	1	0.000	0.000	0.000
Small Group (3-8)	3	1	0	0	0	0	1	0.000	0.000	0.000
Large Group (>8)	4	1	0	0	0	0	1	0.000	0.000	0.000
None of the above	5	1	0	0	0	2	3	.667	.667	.643
Marginal Totals		28	0	0	0	2	30			

Category Marginal Agreement: .305

Cohen's Kappa: .459

Table 78

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	9	0	0	0	0	9	1.000	.818	1.000
Pair	2	1	0	0	0	0	1	0.000	0.000	0.000
Small Group (3-8)	3	1	0	0	0	0	1	0.000	0.000	0.000
Large Group (>8)	4	0	0	0	12	0	12	1.000	1.000	1.000
None of the above	5	0	0	0	0	7	7	1.000	1.000	1.000
Marginal Totals		11	0	0	12	7	30			

Category Marginal Agreement: .564

Cohen's Kappa: .901

Table 79

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                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                         Reliability on Grouping
                         Observer 40   Expert 80
                          School 801   Grade 5
                             Week  0   Day 5
                                   DMP


                          Category chosen by Observer 40                                               Light's
Category chosen          Cat.                                        Marginal     Nominal     Marginal    Extension
 by Expert 80             #      1    2    3    4    5              Totals     Agreement   Agreement   of Kappa

                            ++++++++++++++++++++++++++++++++++++++++
                            +                              +         +
Individual                1 +    9    0    0    0    0     +    9    +     1.000        .900      1.000
                            +                              +         +
Pair                      2 +    1    0    0    0    0     +    1    +     0.000       0.000      0.000
                            +                              +         +
Small Group (3-8)         3 +    0    0    1    0    0     +    1    +     1.000       1.000      1.000
                            +                              +         +
Large Group (>8)          4 +    0    0    0   12    0     +   12    +     1.000        .923      1.000
                            +                              +         +
None of the above         5 +    0    0    0    1    6     +    7    +      .857        .857       .821
                            +                              +         +
                            ++++++++++++++++++++++++++++++++++++++++
                            +                              +         +
          Marginal Totals   +   10    0    1   13    6     +   30    +
                            +                              +         +
                            ++++++++++++++++++++++++++++++++++++++++


                         Category Marginal Agreement:  .736

                              Cohen's Kappa:  .902
```

Table 80

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	0	0	0	0	1	1	0,000	0,000	0,000
Pair	2	0	0	0	0	0	0	-----	-----	-----
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	0	0	0	51	1	52	,981	,981	,654
None of the above	5	0	0	0	0	1	1	1.000	,333	1.000
Marginal Totals		0	0	0	51	3	54			

Category Marginal Agreement: ,438

Cohen's Kappa: ,586

Table 81

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20   Expert 90
School 801   Grade 2
Week 0   Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	0	0	0	0	1	1	0.000	1.000	-.019
Pair	2	0	0	0	0	0	0	-----	-----	---.-
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	---.-
Large Group (>8)	4	1	0	0	49	2	52	.942	.962	.221
None of the above	5	0	0	0	1	0	1	0.000	.333	-.059
Marginal Totals		1	0	0	50	3	54			

Category Marginal Agreement: .765

Cohen's Kappa: .135

Table 82

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	39	1	0	0	1	41	.951	.953	.761
Pair	2	3	2	0	0	1	6	.333	.500	.294
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	0	0	0	0	2	2	0.000	.500	-.019
None of the above	5	1	0	0	1	3	5	.600	.714	.540
Marginal Totals		43	3	0	1	7	54			

Category Marginal Agreement: .667

Cohen's Kappa: .508

Table 83

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	40	1	0	0	0	41	.976	1.000	.899
Pair	2	1	5	0	0	0	6	.833	1.000	.813
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	0	0	0	2	0	2	1.000	1.000	1.000
None of the above	5	0	0	0	0	5	5	1.000	1.000	1.000
Marginal Totals		41	6	0	2	5	54			

Category Marginal Agreement; 1.000

Cohen's Kappa: .908

Table 84

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10 Expert 80
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	30	0	0	1	0	31	.968	.968	.948
Pair	2	0	1	0	0	0	1	1.000	1.000	1.000
Small Group (3-8)	3	0	0	4	0	0	4	1.000	1.000	1.000
Large Group (>8)	4	0	0	0	32	5	37	.865	.946	.755
None of the above	5	0	0	0	2	3	5	.600	.625	.554
Marginal Totals		30	1	4	35	8	78			

Category Marginal Agreement: .908

Cohen's Kappa: .836

Table 85

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20 Expert 80
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	30	1	0	0	0	31	.968	1.000	.946
Pair	2	1	0	0	0	0	1	0.000	1.000	-.013
Small Group (3-8)	3	0	0	4	0	0	4	1.000	1.000	1.000
Large Group (>8)	4	0	0	0	35	2	37	.946	.974	.895
None of the above	5	0	0	0	3	2	5	.400	.800	.368
Marginal Totals		31	1	4	38	4	78			

Category Marginal Agreement: .955

Cohen's Kappa: .852

Table 86

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	40	1	0	0	0	41	.976	.651	.902
Pair	2	16	7	0	0	0	23	.304	.435	.210
Small Group (3-8)	3	7	2	0	0	0	9	0.000	0.000	0.000
Large Group (>8)	4	0	0	0	0	3	3	0.000	0.000	0.000
None of the above	5	0	0	0	0	8	8	1.000	.727	1.000
Marginal Totals		63	10	0	0	11	84			

Category Marginal Agreement: .363

Cohen's Kappa: .414

Table 88

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	40	0	1	0	0	41	,976	,661	,907
Pair	2	15	8	0	0	0	23	,348	,391	,270
Small Group (3-8)	3	7	1	1	0	0	9	,111	,222	,089
Large Group (>8)	4	0	0	0	2	1	3	,667	,667	,659
None of the above	5	0	0	0	0	8	8	1,000	,889	1,000
Marginal Totals		62	9	2	2	9	84			

Category Marginal Agreement: ,566

Cohen's Kappa: ,501

Table 87

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	39	0	0	39	1.000	.929	1.000
Not used	2	3	12	0	15	.800	.800	.743
Other	3	0	0	0	0	-----	-----	-----
Marginal Totals		42	12	0	54			

Category Marginal Agreement: .864

Cohen's Kappa: .852

Table 89

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	37	1	1	39	.949	.867	.892
Not used	2	8	5	2	15	.333	.400	.250
Other	3	0	0	0	0	-----	0.000	-----
Marginal Totals		45	6	3	54			

Category Marginal Agreement: .422

Cohen's Kappa: .395

Table 90

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30   Expert 80
School 801   Grade 2
Week 0   Day 4
WDRSD

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	46	2	1	49	.939	.980	.633
Not used	2	0	0	0	0	-----	0.000	-----
Other	3	4	0	7	11	.636	.727	.580
Marginal Totals		50	2	8	60			

Category Marginal Agreement: .569

Cohen's Kappa: .605

Table 91

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                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                       Reliability on Materials
                       Observer 40   Expert 80
                       School 801    Grade 2
                          Week  0    Day 4
                                WDRSD


                       Material: Paper/pencil


                         Category chosen
                         by Observer 40                                                  Light's
Category chosen        Cat.                       Marginal   Nominal    Marginal    Extension
by Expert 80            #      1    2    3         Totals   Agreement  Agreement   of Kappa

                          ++++++++++++++++++++++++++++++
                          +                   +         +
    Used                1 +   47    1    1    +   49    +     .959       .980        .755
                          +                   +         +
    Not used            2 +    0    0    0    +    0    +     -----      0.000       -----
                          +                   +         +
    Other               3 +    3    0    8    +   11    +     .727       .818        .679
                          +                   +         +
                          ++++++++++++++++++++++++++++++
                          +                   +         +
        Marginal Totals   +   50    1    9    +   60    +
                          +                   +         +
                          ++++++++++++++++++++++++++++++


                 Category Marginal Agreement:  .599

                       Cohen's Kappa:  .715
```

Table 92

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10   Expert 80
School 801   Grade 2
Week 0   Day 4
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	57	2	2	61	.934	.967	.780
Not used	2	2	2	0	4	.500	.667	.462
Other	3	0	2	17	19	.895	1.000	.864
Marginal Totals		59	6	19	84			

Category Marginal Agreement: .878

Cohen's Kappa: .781

Table 93

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                         Reliability on Materials
                         Observer 20   Expert 80
                          School 801   Grade 2
                            Week  0    Day 4
                                  DMP


                         Material: Paper/pencil


                          Category chosen
                          by Observer 20                                        Light's
Category chosen         Cat.                       Marginal   Nominal    Marginal   Extension
 by Expert 80            #     1    2    3          Totals   Agreement  Agreement   of Kappa

                          +++++++++++++++++++++++++++
                          +                  +      +
    Used                1 +   59    1    1   +   61 +      .967       1.000        .880
                          +                  +      +
    Not used            2 +    1    3    0   +    4 +      .750       1.000        .737
                          +                  +      +
    Other               3 +    1    0   18   +   19 +      .947       1.000        .932
                          +                  +      +
                          +++++++++++++++++++++++++++
                          +                  +      +
         Marginal Totals  +   61    4   19   +   84 +
                          +                  +      +
                          +++++++++++++++++++++++++++


                          Category Marginal Agreement: 1.000

                              Cohen's Kappa:  .886
```

Table 94

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 90
School 801 Grade 5
Week 0 Day 4
DMP

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	54	0	1	55	.982	.902	.917
Not used	2	5	7	3	15	.467	.667	.388
Other	3	2	3	3	8	.375	.875	.313
Marginal Totals		61	10	7	78			

Category Marginal Agreement: .814

Cohen's Kappa: .567

Table 95

```
                 Phase IV - IGE Evaluation Project
                 Descriptive Study - Spring 1978

                     Reliability on Materials
                     Observer 40    Expert 90
                      School 801    Grade 5
                         Week  0    Day 4
                                DMP


                     Material: Paper/pencil


                        Category chosen
                        by Observer 40                                                 Light's
Category chosen      Cat.                     Marginal    Nominal     Marginal     Extension
 by Expert 90          #     1     2     3      Totals    Agreement   Agreement    of Kappa

                        ++++++++++++++++++++++++++++++++++
                        +                    +           +
    Used              1 +   55     0     0   +     55    +     1.000       .902        1.000
                        +                    +           +
    Not used          2 +    5    10     0   +     15    +      .667       .667         .618
                        +                    +           +
    Other             3 +    1     0     7   +      8    +      .875       .875         .863
                        +                    +           +
                        ++++++++++++++++++++++++++++++++++
                        +                    +           +
        Marginal Totals +   61    10     7   +     78    +
                        +                    +           +
                        ++++++++++++++++++++++++++++++++++


                  Category Marginal Agreement:  .814

                        Cohen's Kappa:  .815
```

Table 96

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10   Expert 90
School 801   Grade 5
Week 0   Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	25	0	2	27	.926	.926	.556
Not used	2	0	0	0	0	-----	-----	-----
Other	3	0	0	3	3	1.000	.600	1.000
Marginal Totals		25	0	5	30			

Category Marginal Agreement: .763

Cohen's Kappa: .714

Table 97

```
                         Phase IV - IGE Evaluation Project
                          Descriptive Study - Spring 1978

                              Reliability on Materials
                             Observer 20    Expert 90
                              School 801    Grade 5
                                 Week  0    Day 5
                                         DMP


                             Material: Paper/pencil


                           Category chosen
                           by Observer 20                                               Light's
Category chosen     Cat.                            Marginal   Nominal    Marginal    Extension
 by Expert 90        #       1     2     3          Totals    Agreement  Agreement    of Kappa

                       ++++++++++++++++++++++++++
                       +                    +        +
     Used            1 +    27     0     0  +   27   +    1.000      1.000       1.000
                       +                    +        +
     Not used        2 +     0     0     0  +    0   +    -----      0.000       -----
                       +                    +        +
     Other           3 +     0     1     2  +    3   +     .667       .667        .643
                       +                    +        +
                       ++++++++++++++++++++++++++
                       +                    +        +
        Marginal Totals +   27     1     2  +   30   +
                       +                    +        +
                       ++++++++++++++++++++++++++


                      Category Marginal Agreement:  .556

                           Cohen's Kappa:  .818
```

Table 98

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	19	4	0	23	.826	.826	.526
Not used	2	0	0	0	0	-----	0.000	-----
Other	3	0	0	7	7	1.000	1.000	1.000
Marginal Totals		19	4	7	30			

Category Marginal Agreement: .609

Cohen's Kappa: .710

Table 99

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	23	0	0	23	1.000	.958	1.000
Not used	2	0	0	0	0	-----	-----	-----
Other	3	1	0	6	7	.857	.857	.821
Marginal Totals		24	0	6	30			

Category Marginal Agreement: .908

Cohen's Kappa: .902

Table 100

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 5
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	6	0	6	0.000	0.000	0.000
Not used	2	0	45	2	47	.957	.922	.234
Other	3	0	0	1	1	1.000	.333	1.000
Marginal Totals		0	51	3	54			

Category Marginal Agreement: .418

Cohen's Kappa: .163

Table 101

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 5
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	6	0	6	0.000	0.000	0.000
Not used	2	0	44	3	47	.936	.922	-.149
Other	3	0	1	0	1	0.000	.333	-.059
Marginal Totals		0	51	3	54			

Category Marginal Agreement: .418

Cohen's Kappa: -.047

Table 102

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                        Reliability on Materials
                        Observer 30    Expert 80
                        School 801     Grade 2
                          Week  0      Day 5
                                 WDRSD


                       Material: Paper/pencil


                     Category chosen
                     by Observer 30                                                 Light's
Category chosen      Cat.                       Marginal    Nominal    Marginal    Extension
 by Expert 80         #     1     2     3        Totals    Agreement   Agrement    of Kappa

                       ++++++++++++++++++++++++++++++++
                       +                     +         +
     Used             1 +  41     3     3    +   47    +    .872        .936         .311
                       +                     +         +
     Not used         2 +   1     1     0    +    2    +    .500        .500         .460
                       +                     +         +
     Other            3 +   2     0     3    +    5    +    .600        .833         .550
                       +                     +         +
                       ++++++++++++++++++++++++++++++++
                       +                     +         +
        Marginal Totals +  44     4     6    +   54    +
                       +                     +         +
                       ++++++++++++++++++++++++++++++++


                  Category Marginal Agreement:  .757

                        Cohen's Kappa:  .400
```

Table 103

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	47	0	0	47	1.000	.959	1.000
Not used	2	2	0	0	2	0.000	0.000	0.000
Other	3	0	0	5	5	1.000	1.000	1.000
Marginal Totals		49	0	5	54			

Category Marginal Agreement: .653

Cohen's Kappa: .816

Table 104

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 80
School 801 Grade 2
Week 0 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	44	1	0	45	.978	1.000	.947
Not used	2	0	23	5	28	.821	.893	.737
Other	3	1	1	3	5	.600	.625	.554
Marginal Totals		45	25	8	78			

Category Marginal Agreement: .839

Cohen's Kappa: .812

Table 105

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 80
School 801 Grade 2
Week 0 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	42	3	0	45	.933	.978	.838
Not used	2	1	25	2	28	.893	1.000	.833
Other	3	3	0	2	5	.400	.800	.368
Marginal Totals		46	28	4	78			

Category Marginal Agreement: .926

Cohen's Kappa: .781

Table 106

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                      Reliability on Materials
                      Observer 30   Expert 90
                       School 801   Grade 2
                         Week  0    Day 5
                                DMP


                      Material: Paper/pencil


                        Category chosen
                        by Observer 30                                                 Light's
Category chosen      Cat.                          Marginal   Nominal     Marginal    Extension
 by Expert 90          #      1     2     3         Totals   Agreement   Agreement   of Kappa

                     ++++++++++++++++++++++++++++++
                     +                    +        +
    Used           1 +   73     0     0   +   73   +   1.000       1.000       1.000
                     +                    +        +
    Not used       2 +    0     0     3   +    3   +   0.000       0.000       0.000
                     +                    +        +
    Other          3 +    0     0     8   +    8   +   1.000        .727       1.000
                     +                    +        +
                     ++++++++++++++++++++++++++++++
                     +                    +        +
       Marginal Totals +   73     0    11   +   84   +
                     +                    +        +
                     ++++++++++++++++++++++++++++++


                 Category Marginal Agreement:  .576

                         Cohen's Kappa:  .846
```

Table 107

```
            Phase IV - IGE Evaluation Project
           Descriptive Study - Spring 1978

              Reliability on Materials
               Observer 40   Expert 90
               School 801    Grade 2
                 Week  0     Day 5
                           DMP


               Material: Paper/pencil


                  Category chosen
                  by Observer 10                                                   Light's
Category chosen      Cat.                       Marginal   Nominal     Marginal    Extension
by Expert 90          #      1     2     3      Totals    Agreement   Agreement   of Kappa

                      ++++++++++++++++++++++++++++++
                      +                   +         +
   Used             1 +  73    0     0    +   73    +    1.000       1.000       1.000
                      +                   +         +
   Not used         2 +   0    2     1    +    3    +     .667        .667        .659
                      +                   +         +
   Other            3 +   0    0     8    +    8    +    1.000        .889       1.000
                      +                   +         +
                      ++++++++++++++++++++++++++++++
                      +                   +         +
      Marginal Totals +  73    2     9    +   84    +
                      +                   +         +
                      ++++++++++++++++++++++++++++++


           Category Marginal Agreement:  .852

                  Cohen's Kappa:  .949
```

Table 108

Phase IV - ISE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 80
School 801 Grade 2
Week 0 Day 4
DMP

Material: Manipulative

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	8	1	0	9	.889	1.000	.876
Not used	2	1	53	2	56	.946	1.000	.839
Other	3	0	2	17	19	.895	1.000	.864
Marginal Totals		9	56	19	84			

Category Marginal Agreement: 1.000

Cohen's Kappa: .855

Table 109

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 80
School 801 Grade 2
Week 0 Day 4
DMP

Material: Manipulative

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	6	3	0	9	.667	.667	.641
Not used	2	0	55	1	56	.982	.949	.940
Other	3	0	1	18	19	.947	1.000	.932
Marginal Totals		6	59	19	84			

Category Marginal Agreement: .872

Cohen's Kappa: .874

Table 110

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 90
School 801 Grade 2
Week 0 Day 4
DMP

Material: Manipulative

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	20	3	0	23	.870	.767	.788
Not used	2	10	33	4	47	.702	.872	.372
Other	3	0	5	3	8	.375	.875	.313
Marginal Totals		30	41	7	78			

Category Marginal Agreement: .838

Cohen's Kappa: .497

Table 111

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 90
School 801 Grade 2
Week 0 Day 4
DMP

Material: Manipulative

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	21	2	0	23	.913	.561	.817
Not used	2	20	27	0	47	.574	.638	.309
Other	3	0	1	7	8	.875	.875	.863
Marginal Totals		41	30	7	78			

Category Marginal Agreement: .691

Cohen's Kappa: .512

Table 112

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 5
Week 0 Day 5
DMP

Material: Manipulative

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	9	4	1	14	.643	.643	.490
Not used	2	0	12	1	13	.923	.813	.835
Other	3	0	0	3	3	1.000	.600	1.000
Marginal Totals		9	16	5	30			

Category Marginal Agreement: .685

Cohen's Kappa: .673

Table 113

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 5
Week 0 Day 5
DMP

Material: Manipulative

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	13	1	0	14	.929	.929	.874
Not used	2	0	13	0	13	1.000	.867	1.000
Other	3	0	1	2	3	.667	.667	.643
Marginal Totals		13	15	2	30			

Category Marginal Agreement: .821

Cohen's Kappa: .884

Table 114

```
                        Phase IV - IGE Evaluation Project
                        Descriptive Study - Spring 1978

                             Reliability on Materials
                              Observer 20   Expert 90
                               School 801   Grade 2
                                  Week  0   Day 5
                                        WDRSD


                             Material: Manipulative


                           Category chosen
                           by Observer 20                                             Light's
Category chosen       Cat.                        Marginal   Nominal    Marginal    Extension
 by Expert 90          #       1     2     3       Totals   Agreement  Agreement    of Kappa

                         ++++++++++++++++++++++++++++++
                         +                   +        +
    Used               1 +     0     0     0 +     0  +    -----       0.000        -----
                         +                   +        +
    Not used           2 +    50     0     3 +    53  +    0.000       0.000        0.000
                         +                   +        +
    Other              3 +     1     0     0 +     1  +    0.000        .333        -.059
                         +                   +        +
                         ++++++++++++++++++++++++++++++
                         +                   +        +
        Marginal Totals  +    51     0     3 +    54  +
                         +                   +        +
                         ++++++++++++++++++++++++++++++


                    Category Marginal Agreement:  .111

                           Cohen's Kappa: -.001
```

Table 115

```
                      Phase IV - IGE Fvaluation Project
                      Descriptive Study - Spring 1978

                          Reliability on Materials
                          Observer 10   Expert 80
                           School 801   Grade 2
                              Week  0   Day 5
                                     DMP


                          Material: Manipulative


                            Category chosen
                            by Observer 10                                                Light's
Category chosen         Cat.                    Marginal   Nominal    Marginal   Extension
 by Expert 80            #     1    2    3      Totals   Agreement  Agreement   of Kappa

                          +++++++++++++++++++++++++++
                          +                 +       +
     Used               1 +   20    3    0  +   23  +     .870       .920       .808
                          +                 +       +
     Not used           2 +    5   40    5  +   50  +     .800       .900       .527
                          +                 +       +
     Other              3 +    0    2    3  +    5  +     .600       .625       .554
                          +                 +       +
                          +++++++++++++++++++++++++++
                          +                 +       +
         Marginal Totals  +   25   45    8  +   78  +
                          +                 +       +
                          +++++++++++++++++++++++++++


                  Category Marginal Agreement:  .815

                         Cohen's Kappa:  .637
```

Table 116

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                       Reliability on Materials
                       Observer 20   Expert 80
                       School 801    Grade 2
                          Week  0    Day 5
                                DMP


                       Material: Manipulative


                       Category chosen
                       by Observer 20                                                  Light's
Category chosen       Cat.                        Marginal   Nominal     Marginal     Extension
by Expert 80           #       1     2     3       Totals   Agreement   Agreement     of Kappa

                        ++++++++++++++++++++++++++++
                        +                    +       +
     Used             1 +     22     1     0 +    23 +      .957        .821          .932
                        +                    +       +
     Not used         2 +      6    42     2 +    50 +      .840        .920          .610
                        +                    +       +
     Other            3 +      0     3     2 +     5 +      .400        .800          .368
                        +                    +       +
                        ++++++++++++++++++++++++++++
                        +                    +       +
         Marginal Totals +    28    46     4 +    78 +
                        +                    +       +
                        ++++++++++++++++++++++++++++


                    Category Marginal Agreement:  .847

                          Cohen's Kappa:  .700
```

Table 117

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Material: Manipulative

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	41	8	0	49	.837	.878	.666
Not used	2	2	22	3	27	.815	.900	.712
Other	3	0	0	8	8	1.000	.727	1.000
Marginal Totals		43	30	11	84			

Category Marginal Agreement: .835

Cohen's Kappa: .730

Table 118

```
                   Phase IV - IGE Evaluation Project
                   Descriptive Study - Spring 1978

                       Reliability on Materials
                       Observer 40   Expert 90
                        School 601   Grade 2
                           Week  0   Day 5
                                DMP


                       Material: Manipulative


                       Category chosen
                       by Observer 10                                          Light's
Category chosen     Cat.                     Marginal   Nominal    Marginal    Extension
 by Expert 90        #       1    2    3      Totals    Agreement  Agreement   of Kappa

                       ++++++++++++++++++++++++++++
                       +                  +        +
    Used             1 +    41    8    0  +   49   +     .837       .898        .657
                       +                  +        +
    Not used         2 +     3   23    1  +   27   +     .852       .871        .765
                       +                  +        +
    Other            3 +     0    0    8  +    8   +    1.000       .889       1.000
                       +                  +        +
                       ++++++++++++++++++++++++++++
                       +                  +        +
       Marginal Totals +    44   31    9  +   84   +
                       +                  +        +
                       ++++++++++++++++++++++++++++


                    Category Marginal Agreement:  .886

                           Cohen's Kappa:  .747
```

Table 119

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 601 Grade 2
Week 0 Day 5
WDRSD

Material: Game

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	51	0	2	53	.962	.962	.321
Not used	2	0	0	0	0	-----	-----	-----
Other	3	0	0	1	1	1.000	.333	1.000
Marginal Totals		51	0	3	54			

Category Marginal Agreement: .648

Cohen's Kappa: .486

Table 120

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                        Reliability on Materials
                        Observer 20   Expert 90
                        School 801    Grade 2
                          Week  0     Day 5
                                WDRSD


                            Material: Game


                   Category chosen
                   by Observer 20                                                Light's
Category chosen          Cat.                      Marginal    Nominal     Marginal    Extension
by Expert 90              #     1    2    3         Totals    Agreement   Agreement    of Kappa

                          +++++++++++++++++++++++++++++
                          +                +         +
    Used                1 +     0   50    3  +   53    +   0.000       0.000       0.000
                          +                +         +
    Not used            2 +     0    0    0  +    0    +   -----       0.000       -----
                          +                +         +
    Other               3 +     0    1    0  +    1    +   0.000        .333       -.059
                          +                +         +
                          +++++++++++++++++++++++++++++
                          +                +         +
       Marginal Totals    +     0   51    3  +   54    +
                          +                +         +
                          +++++++++++++++++++++++++++++


                Category Marginal Agreement:  .111

                      Cohen's Kappa: -.001
```

Table 121

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Material: Game

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	0	3	3	0.000	0.000	0.000
Not used	2	0	73	0	73	1.000	1.000	1.000
Other	3	0	0	8	8	1.000	.727	1.000
Marginal Totals		0	73	11	84			

Category Marginal Agreement: .576

Cohen's Kappa: .846

Table 122

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Material: Game

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	2	1	3	0.000	0.000	0.000
Not used	2	0	73	0	73	1.000	.973	1.000
Other	3	0	0	8	8	1.000	.889	1.000
Marginal Totals		0	75	9	84			

Category Marginal Agreement: .621

Cohen's Kappa: .833

Table 123

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Material: Audio/visual aid

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	1	0	1	0.000	0.000	0.000
Not used	2	0	72	3	75	.960	.973	.695
Other	3	0	0	8	8	1.000	.727	1.000
Marginal Totals		0	73	11	84			

Category Marginal Agreement: .567

Cohen's Kappa: .775

Table 124

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                        Reliability on Materials
                        Observer 40   Expert 90
                         School 801   Grade 2
                            Week  0   Day 5
                                  DMP


                     Material: Audio/visual aid



                         Category chosen
                         by Observer 10                                          Light's
Category chosen    Cat.                          Marginal  Nominal    Marginal   Extension
 by Expert 90        #      1    2    3          Totals    Agreement  Agreement  of Kappa

                      ++++++++++++++++++++++++++++++++++
                      +                       +         +
    Used            1 +     0    1    0       +    1    +   0.000      0.000      0.000
                      +                       +         +
    Not used        2 +     0   74    1       +   75    +    .987      1.000       .876
                      +                       +         +
    Other           3 +     0    0    8       +    8    +   1.000       .889      1.000
                      +                       +         +
                      ++++++++++++++++++++++++++++++++++
                      +                       +         +
       Marginal Totals +    0   75    9       +   84    +
                      +                       +         +
                      ++++++++++++++++++++++++++++++++++


                    Category Marginal Agreement:  .630

                         Cohen's Kappa:  .876
```

Table 125

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	21	4	0	25	.840	.920	.721
Not used	2	2	27	0	29	.931	.935	.838
Other	3	0	0	0	0	-----	-----	-----
Marginal Totals		23	31	0	54			

Category Marginal Agreement: .928

Cohen's Kappa: .775

Table 126

```
                     Phase IV - IGE Evaluation Project
                     Descriptive Study - Spring 1978

                         Reliability on Materials
                         Observer 20    Expert 90
                          School 801    Grade 2
                             Week  0    Day 4
                                  WDRSD


                       Material: Printed material


                           Category chosen
                           by Observer 20                                                     Light's
Category chosen          Cat.                      Marginal    Nominal     Marginal    Extension
 by Expert 90             #      1    2    3       Totals    Agreement   Agreement   of Kappa

                            ++++++++++++++++++++++++++++++
                            +                 +         +
     Used                 1 +   16    8    1  +    25   +     .640         .880        .392
                            +                 +         +
     Not used             2 +    6   21    2  +    29   +     .724        1.000        .404
                            +                 +         +
     Other                3 +    0    0    0  +     0   +     -----       0.000        -----
                            +                 +         +
                            ++++++++++++++++++++++++++++++
                            +                 +         +
          Marginal Totals   +   22   29    3  +    54   +
                            +                 +         +
                            ++++++++++++++++++++++++++++++


                  Category Marginal Agreement:  .627

                         Cohen's Kappa:  .398
```

Table 127

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30   Expert 80
School 801   Grade 2
Week 0   Day 4
WDRSD

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	0	0	0	-----	0.000	-----
Not used	2	4	44	1	49	.898	.980	.490
Other	3	0	4	7	11	.636	.727	.580
Marginal Totals		4	48	8	60			

Category Marginal Agreement: .569

Cohen's Kappa: .534

Table 128

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 4
WDRSD

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	0	0	0	-----	0.000	-----
Not used	2	12	36	1	49	.735	.796	.242
Other	3	0	3	8	11	.727	.818	.679
Marginal Totals		12	39	9	60			

Category Marginal Agreement: .538

Cohen's Kappa: .396

Table 129

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer /O Expert 80
School 801 Grade 2
Week 0 Day 4
DMP

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	0	0	0	-----	0.000	-----
Not used	2	1	62	2	65	.954	.985	.806
Other	3	0	2	17	19	.895	1.000	.864
Marginal Totals		1	64	19	84			

Category Marginal Agreement: .662

Cohen's Kappa: .834

Table 130

```
                         Phase IV - IGE Evaluation Project
                         Descriptive Study - Spring 1978

                               Reliability on Materials
                               Observer 10   Expert 90
                               School 801    Grade 5
                               Week  0       Day 5
                                       DMP


                          Material: Printed material


                          Category chosen
                          by Observer 10                                               Light's
Category chosen       Cat.                          Marginal   Nominal    Marginal    Extension
 by Expert 90          #     1      2      3         Totals   Agreement   Agreement   of Kappa

                        +++++++++++++++++++++++++++
                        +                     +         +
     Used             1 +    0      0      0  +    0    +    -----       0.000       -----
                        +                     +         +
     Not used         2 +    3     22      2  +   27    +     .815        .815        .306
                        +                     +         +
     Other            3 +    0      0      3  +    3    +    1.000        .600       1.000
                        +                     +         +
                        +++++++++++++++++++++++++++
                        +                     +         +
         Marginal Totals +   3     22      5  +   30    +
                        +                     +         +
                        +++++++++++++++++++++++++++


                     Category Marginal Agreement:  .472

                          Cohen's Kappa:  .485
```

Table 131

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                         Reliability on Materials
                          Observer 20   Expert 90
                           School 801   Grade 5
                              Week  0   Day 5
                                   DMP


                    Material: Printed material


                            Category chosen
                            by Observer 20                                                     Light's
Category chosen         Cat.                          Marginal    Nominal     Marginal    Extension
 by Expert 90            #      1     2     3          Totals    Agreement   Agreement    of Kappa

                           +++++++++++++++++++++++++++++
                           +                   +        +
    Used                 1 +    0     0     0  +    0   +     -----        0.000         -----
                           +                   +        +
    Not used             2 +    1    26     0  +   27   +      .963        1.000          .630
                           +                   +        +
    Other                3 +    0     1     2  +    3   +      .667         .667          .643
                           +                   +        +
                           +++++++++++++++++++++++++++++
                           +                   +        +
        Marginal Totals    +    1    27     2  +   30   +
                           +                   +        +
                           +++++++++++++++++++++++++++++


                    Category Marginal Agreement:  .556

                          Cohen's Kappa:  .636
```

Table 132

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	0	0	0	-----	0.000	-----
Not used	2	8	15	0	23	.652	.652	.304
Other	3	0	0	7	7	1.000	1.000	1.000
Marginal Totals		8	15	7	30			

Category Marginal Agreement: .551

Cohen's Kappa: .526

Table 133

```
                     Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                         Reliability on Materials
                         Observer 40   Expert 80
                          School 801   Grade 5
                             Week  0   Day 5
                                  DMP


                     Material: Printed material


                             Category chosen
                             by Observer 40                                                Light's
Category chosen        Cat.                        Marginal    Nominal     Marginal    Extension
 by Expert 80           #      1     2     3        Totals    Agreement   Agreement    of Kappa

                         +++++++++++++++++++++++++
                         +                   +     +
      Used             1 +     0     0     0 +   0 +       -----        0.000         -----
                         +                   +     +
      Not used         2 +     3    20     0 +  23 +        .870         .913          .565
                         +                   +     +
      Other            3 +     0     1     6 +   7 +        .857         .857          .821
                         +                   +     +
                         +++++++++++++++++++++++++
                         +                   +     +
        Marginal Totals  +     3    21     6 +  30 +
                         +                   +     +
                         +++++++++++++++++++++++++


                  Category Marginal Agreement:  .590

                        Cohen's Kappa:  .680
```

Table 134

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 5
WDRSD

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	0	0	0	-----	0.000	-----
Not used	2	50	0	3	53	0.000	0.000	0.000
Other	3	1	0	0	1	0.000	.333	-.059
Marginal Totals		51	0	3	54			

Category Marginal Agreement: .111

Cohen's Kappa: -.001

Table 135

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	16	4	0	20	.800	.850	.708
Not used	2	1	25	3	29	.862	.935	.676
Other	3	0	2	3	5	.600	.833	.550
Marginal Totals		17	31	6	54			

Category Marginal Agreement: .873

Cohen's Kappa: .672

Table 136

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Material: Printed material

		Category chosen by Observer 40						
Category chosen by Expert 80	Cat. #	1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	20	0	0	20	1.000	.952	1.000
Not used	2	1	28	0	29	.966	.966	.928
Other	3	0	0	5	5	1.000	1.000	1.000
Marginal Totals		21	28	5	54			

Category Marginal Agreement: .973

Cohen's Kappa: .967

Table 137

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	3	4	2	1	0	1	0	11	.273	.545	.182
Engaged - oral	2	0	0	2	0	0	0	0	2	0.000	.286	-.149
Engaged - covert	3	3	2	6	1	1	2	0	15	.400	.882	.124
Not engaged - interim	4	0	0	0	4	1	1	0	6	.667	.857	.617
Not engaged - waiting	5	0	1	6	1	3	1	0	12	.250	.500	.156
Not engaged -off task	6	0	0	1	0	1	6	0	8	.750	.727	.686
None of the above	7	0	0	0	0	0	0	0	0	-----	-----	-----
Marginal Totals		6	7	17	7	6	11	0	54			

Category Marginal Agreement: .633

Cohen's Kappa: .274

Table 138

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	7	2	2	0	0	0	0	11	.636	1.000	.543
Engaged - oral	2	0	1	1	0	0	0	0	2	.500	.333	.437
Engaged - covert	3	2	1	10	0	0	1	1	15	.667	.833	.500
Not engaged - interim	4	1	0	0	3	1	1	0	6	.500	.833	.449
Not engaged - waiting	5	0	2	4	1	0	3	2	12	0.000	.083	-.019
Not engaged -off task	6	1	0	1	1	0	5	0	8	.625	.800	.540
None of the above	7	0	0	0	0	0	0	0	0	-----	0.000	-----
Marginal Totals		11	6	18	5	1	10	3	54			

Category Marginal Agreement: .555

Cohen's Kappa: .360

Table 139

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	8	0	1	0	0	0	0	9	.889	1.000	.869
Engaged - oral	2	0	2	0	0	0	0	0	2	1.000	.333	1.000
Engaged - covert	3	1	3	14	1	0	2	0	21	.667	.810	.535
Not engaged - interim	4	0	0	0	1	1	0	0	2	.500	.500	.464
Not engaged - waiting	5	0	0	0	0	5	1	0	6	.833	.857	.811
Not engaged -off task	6	0	1	0	1	0	6	1	9	.667	1.000	.608
None of the above	7	0	0	2	1	1	0	7	11	.636	.727	.580
Marginal Totals		9	6	17	4	7	9	8	60			

Category Marginal Agreement: .747

Cohen's Kappa: .652

Table 140

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1976

Reliability on Learner Moves
Observer 40   Expert 80
School 801   Grade 2
Week 0   Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	8	0	1	0	0	0	0	9	.889	.900	.867
Engaged - oral	2	0	1	1	0	0	0	0	2	.500	.500	.464
Engaged - covert	3	1	3	17	0	0	0	0	21	.810	.913	.691
Not engaged - interim	4	0	0	1	1	0	0	0	2	.500	.500	.492
Not engaged - waiting	5	0	0	0	0	4	2	0	6	.667	.833	.636
Not engaged -off task	6	0	0	1	0	1	6	1	9	.667	.889	.615
None of the above	7	1	0	2	0	0	0	8	11	.727	.818	.679
Marginal Totals		10	4	23	1	5	8	9	60			

Category Marginal Agreement: .765

Cohen's Kappa: .680

Table 141

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10 Expert 80
School 801 Grade 2
Week 0 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	3	0	5	1	1	0	0	10	,300	,500	,256
Engaged - oral	2	1	1	1	0	0	0	0	3	,333	,375	,263
Engaged - covert	3	0	5	17	1	6	1	0	30	,567	,833	,383
Not engaged - interim	4	0	1	0	1	0	1	0	3	,333	1,000	,309
Not engaged - waiting	5	0	0	2	0	9	1	0	12	,750	,667	,682
Not engaged -off task	6	1	1	0	0	1	2	2	7	,286	,857	,231
None of the above	7	0	0	0	0	1	1	17	19	,895	1,000	,864
Marginal Totals		5	6	25	3	18	6	19	84			

Category Marginal Agreement: ,747

Cohen's Kappa: ,490

Table 142

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20   Expert 80
School 801   Grade 2
Week 0   Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	9	0	0	0	1	0	0	10	.900	.588	.875
Engaged - oral	2	1	1	0	0	1	0	0	3	.333	.429	.273
Engaged - covert	3	3	6	14	1	1	5	0	30	.467	.500	.351
Not engaged - interim	4	0	0	0	2	0	1	0	3	.667	.600	.646
Not engaged - waiting	5	3	0	1	1	4	3	0	12	.333	.583	.273
Not engaged -off task	6	1	0	0	0	0	5	1	7	.714	.500	.657
None of the above	7	0	0	0	1	0	0	18	19	.947	1.000	.932
Marginal Totals		17	7	15	5	7	14	19	84			

Category Marginal Agreement: .600

Cohen's Kappa: .555

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Table 143

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 90
School 801 Grade 2
Week 0 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Engaged - written	1	10	0	2	0	0	1	1	14	.714	.875	.641
Engaged - oral	2	0	2	1	0	0	0	0	3	.667	.375	.629
Engaged - covert	3	5	3	16	0	0	1	0	25	.640	.962	.460
Not engaged - interim	4	0	1	1	10	0	0	0	12	.833	.750	.790
Not engaged - waiting	5	0	0	3	0	1	1	2	7	.143	.143	.132
Not engaged -off task	6	1	1	3	2	0	1	1	9	.111	.444	.063
None of the above	7	0	1	0	4	0	0	3	8	.375	.875	.313
Marginal Totals		16	8	26	16	1	4	7	78			

Category Marginal Agreement: .632

Cohen's Kappa: .442

Table 144

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 19[illegible]

Reliability on Learner Moves
Observer 40   Expert 90
School 801   Grade 2
Week 0   Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	12	0	2	0	0	0	0	14	.857	.824	.817
Engaged - oral	2	0	2	1	0	0	0	0	3	.667	.500	.639
Engaged - covert	3	4	1	19	1	0	0	0	25	.760	.862	.618
Not engaged - interim	4	1	1	1	9	0	0	0	12	.750	1.000	.705
Not engaged - waiting	5	0	0	3	1	2	1	0	7	.286	.286	.267
Not engaged -off task	6	0	1	3	1	0	4	0	9	.444	.556	.406
None of the above	7	0	1	0	0	0	0	7	8	.875	.875	.863
Marginal Totals		17	6	29	12	2	5	7	78			

Category Marginal Agreement: .700

Cohen's Kappa: .630

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Table 145

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10   Expert 90
School 801   Grade 5
Week 0   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	3	0	5	1	0	1	1	11	.273	.636	.051
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	0.000	-----
Engaged - covert	3	3	1	4	0	0	0	1	9	.444	1.000	.206
Not engaged - interim	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Not engaged - waiting	5	0	0	0	0	2	0	0	2	1.000	1.000	1.000
Not engaged -off task	6	1	0	0	0	0	4	0	5	.800	1.000	.760
None of the above	7	0	0	0	0	0	0	3	3	1.000	.600	1.000
Marginal Totals		7	1	9	1	2	5	5	30			

Category Marginal Agreement: .605

Cohen's Kappa: .398

Table 146

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 90
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	9	0	2	0	0	0	0	11	.818	.647	.580
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	0.000	-----
Engaged - covert	3	6	1	1	0	1	0	0	9	.111	.444	-.026
Not engaged - interim	4	0	0	0	0	0	0	0	0	-----	-----	-----
Not engaged - waiting	5	0	0	0	0	2	0	0	2	1.000	.500	1.000
Not engaged -off task	6	2	0	1	0	0	2	0	5	.400	.400	.357
None of the above	7	0	0	0	0	1	0	2	3	.667	.667	.643
Marginal Totals		17	1	4	0	4	2	2	30			

Category Marginal Agreement: .443

Cohen's Kappa: .357

Table 147

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	5	0	2	0	0	0	0	7	.714	.857	.643
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	-----	-----
Engaged - covert	3	1	0	4	0	0	1	0	6	.667	.857	.565
Not engaged - interim	4	0	0	0	1	1	0	0	2	.500	.500	.483
Not engaged - waiting	5	0	0	1	0	5	1	0	7	.714	.857	.643
Not engaged -off task	6	0	0	0	0	0	1	0	1	1.000	.333	1.000
None of the above	7	0	0	0	0	0	0	7	7	1.000	1.000	1.000
Marginal Totals		6	0	7	1	6	3	7	30			

Category Marginal Agreement: .734

Cohen's Kappa: .708

Table 148

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	6	0	0	0	1	0	0	7	,857	1,000	,814
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	0,000	-----
Engaged - covert	3	1	0	5	0	0	0	0	6	,833	1,000	,792
Not engaged - interim	4	0	1	0	1	0	0	0	2	,500	,500	,483
Not engaged - waiting	5	0	0	1	0	6	0	0	7	,857	1,000	,814
Not engaged -off task	6	0	0	0	0	0	1	0	1	1,000	,500	1,000
None of the above	7	0	0	0	0	0	1	6	7	,857	,857	,821
Marginal Totals		7	1	6	1	7	2	6	30			

Category Marginal Agreement: ,694

Cohen's Kappa: ,792

Table 149

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 5
WDR5D

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	0	0	0	0	0	0	0	0	-----	-----	-----
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	0.000	-----
Engaged - covert	3	0	0	11	0	1	0	1	13	.846	.765	.775
Not engaged - interim	4	0	0	1	6	1	0	0	8	.750	.875	.713
Not engaged - waiting	5	0	1	5	1	21	1	1	30	.700	.800	.460
Not engaged -off task	6	0	0	0	0	1	1	0	2	.500	1.000	.481
None of the above	7	0	0	0	0	0	0	1	1	1.000	.333	1.000
Marginal Totals		0	1	17	7	24	2	3	54			

Category Marginal Agreement: .629

Cohen's Kappa: .605

Table 150

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	0	0	0	0	0	0	0	0	-----	0.000	-----
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	0.000	-----
Engaged - covert	3	0	1	8	0	3	0	1	13	.615	.923	.505
Not engaged - interim	4	1	0	0	5	2	0	0	8	.625	.875	.569
Not engaged - waiting	5	1	0	4	1	21	1	2	30	.700	.900	.400
Not engaged -off task	6	0	0	0	0	1	1	0	2	.500	1.000	.481
None of the above	7	0	0	0	1	0	0	0	1	0.000	.333	-.059
Marginal Totals		2	1	12	7	27	2	3	54			

Category Marginal Agreement: .876

Cohen's Kappa: .456

Table 151

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	9	1	1	0	1	0	0	12	.750	.800	.654
Engaged - oral	2	1	1	2	0	0	0	0	4	.250	.500	.221
Engaged - covert	3	2	0	6	0	2	3	1	14	.429	.857	.265
Not engaged - interim	4	1	0	0	0	0	0	1	2	0.000	.500	-.080
Not engaged - waiting	5	0	0	0	1	2	0	2	5	.400	1.000	.339
Not engaged -off task	6	2	0	2	2	0	6	0	12	.500	.750	.400
None of the above	7	0	0	1	1	0	0	3	5	.600	.714	.540
Marginal Totals		15	2	12	4	5	9	7	54			

Category Marginal Agreement: .732

Cohen's Kappa: .388

Table 152

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	10	0	2	0	0	0	0	12	.833	.750	.763
Engaged - oral	2	0	3	1	0	0	0	0	4	.750	1.000	.730
Engaged - covert	3	3	1	7	3	0	0	0	14	.500	1.000	.325
Not engaged - interim	4	0	0	0	2	0	0	0	2	1.000	.286	1.000
Not engaged - waiting	5	0	0	0	1	4	0	0	5	.800	.800	.784
Not engaged -off task	6	3	0	4	1	0	4	0	12	.333	.333	.280
None of the above	7	0	0	0	0	0	0	5	5	1.000	1.000	1.000
Marginal Totals		16	4	14	7	4	4	5	54			

Category Marginal Agreement: .738

Cohen's Kappa: .573

Table 153

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10 Expert 80
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. k	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	4	0	0	1	0	0	0	5	.800	.625	.777
Engaged - oral	2	0	3	0	0	0	0	0	3	1.000	.500	1.000
Engaged - covert	3	3	2	24	10	4	1	2	46	.522	.587	.269
Not engaged - interim	4	0	1	0	2	1	0	0	4	.500	.286	.391
Not engaged - waiting	5	0	0	2	0	6	0	3	11	.545	1.000	.471
Not engaged -off task	6	0	0	1	0	0	3	0	4	.750	1.000	.736
None of the above	7	1	0	0	1	0	0	3	5	.600	.625	.554
Marginal Totals		8	6	27	14	11	4	8	78			

Category Marginal Agreement: .660

Cohen's Kappa: .434

Table 154

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 80
School 801 Grade 2
Week 0 Day 5
DHP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	2	0	2	1	0	0	0	5	.400	.800	.368
Engaged - oral	2	0	3	0	0	0	0	0	3	1.000	.429	1.000
Engaged - covert	3	2	2	38	0	2	1	1	46	.826	.958	.548
Not engaged - interim	4	0	1	2	1	0	0	0	4	.250	.500	.230
Not engaged - waiting	5	0	1	3	0	6	0	1	11	.545	.909	.479
Not engaged -off task	6	0	0	1	0	1	2	0	4	.500	.750	.480
None of the above	7	0	0	2	0	1	0	2	5	.400	.800	.368
Marginal Totals		4	7	48	2	10	3	4	78			

Category Marginal Agreement: .735

Cohen's Kappa: .492

Table 155

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	7	1	0	0	0	0	0	8	,875	,471	,843
Engaged - oral	2	0	1	2	0	1	1	0	5	,200	,714	,127
Engaged - covert	3	5	4	10	0	2	1	0	22	,455	,727	,326
Not engaged - interim	4	3	0	1	7	0	1	0	12	,583	,667	,539
Not engaged - waiting	5	0	0	1	0	3	1	2	7	,429	1,000	,377
Not engaged -off task	6	2	0	2	1	0	13	1	19	,684	,947	,598
None of the above	7	0	1	0	0	1	1	8	11	,727	1,000	,686
Marginal Totals		17	7	16	8	7	18	11	84			

Category Marginal Agreement: ,789

Cohen's Kappa: ,504

Table 156

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 90
School A01 Grade 2
Week [illegible] Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	8	0	0	0	0	0	0	8	1.000	.533	1.000
Engaged - oral	2	0	2	2	0	0	1	0	5	.400	.714	.345
Engaged - covert	3	5	3	12	0	0	2	0	22	.545	.864	.413
Not engaged - interim	4	1	0	2	7	0	2	0	12	.583	.583	.545
Not engaged - waiting	5	0	1	2	0	2	1	1	7	.286	.286	.268
Not engaged -off task	6	1	0	0	0	0	18	0	19	.947	.760	.925
None of the above	7	0	1	1	0	0	1	8	11	.727	.818	.695
Marginal Totals		15	7	19	7	2	25	9	84			

Category Marginal Agreement: .651

Cohen's Kappa: .610

Table 157

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		Category chosen by Observer 10														
Target to Teacher	1	0	0	0	0	0	0	0	1	0	0	1	2	0,000	,667	-,059
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Target to Student	3	0	0	1	0	0	0	0	0	0	0	1	2	,500	,500	,460
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Group	8	1	0	0	0	0	0	0	4	0	0	0	5	,800	,455	,749
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	2	1	3	3	0	0	0	6	0	0	30	45	,667	,711	,182
Marginal Totals		3	1	4	3	0	0	0	11	0	0	32	54			

Category Marginal Agreement: ,389

Cohen's Kappa: ,271

Table 158

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP93
Data File: RELD1

Reliability on Interactions
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		Category chosen by Observer 20														
Target to Teacher	1	0	1	0	0	0	0	0	1	0	0	0	2	0.000	.500	-.080
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Student	3	0	0	1	0	0	0	0	0	0	0	1	2	.500	1.000	.481
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Group	8	1	0	0	0	0	0	0	3	0	0	1	5	.600	.800	.568
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	3	0	1	0	0	0	0	0	0	0	41	45	.911	.956	.564
Marginal Totals		4	1	2	0	0	0	0	4	0	0	43	54			

Category Marginal Agreement: .651

Cohen's Kappa: .488

Table 159

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30											Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7	8	9	10	11				
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Student	3	0	0	3	0	0	0	0	0	0	0	0	3	1.000	.750	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	1	0	0	0	0	1	0.000	0.000	0.000
Other Adult to Target	6	0	1	0	0	0	0	0	0	0	0	0	1	0.000	0.000	0.000
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Teacher to Group	8	0	0	0	0	0	0	0	8	0	0	3	11	.727	.727	.685
Other Adult to Group	9	0	1	0	0	0	0	0	0	0	0	0	1	0.000	0.000	0.000
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	1	0	0	0	0	0	0	0	42	43	.977	.956	.907
Marginal Totals		0	2	4	0	0	0	1	8	0	0	45	60			

Category Marginal Agreement: .304

Cohen's Kappa: .732

Table 160

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                              Phase IV - IGE Evaluation Project                              Date: 06-25-79
                              Descriptive Study - Spring 1978                                Program: RELP95
                                                                                             Data File: RELD1
                                 Reliability on interactions
                                  Observer 40   Expert 80
                                   School 801   Grade 2
                                     Week  0    Day 4
                                           WDRSD


                                          Category chosen by Observer 40                                                           Light's
Category chosen         Cat.                                                                 Marginal    Nominal     Marginal    Extension
 by Expert 80            #      1    2    3    4    5    6    7    8    9   10   11           Totals    Agreement   Agreement   of Kappa

                           ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                           +                                                          +           +
Target to Teacher        1 +    0    0    0    0    0    0    0    0    0    0    0    +     0     +     -----       -----       -----
                           +                                                          +           +
Target to Other Adult    2 +    0    0    0    0    0    0    0    0    0    0    0    +     0     +     -----       -----       -----
                           +                                                          +           +
Target to Student        3 +    0    0    1    0    0    0    2    0    0    0    0    +     3     +      .333        .600        .273
                           +                                                          +           +
Target to Tchr & Grp     4 +    0    0    0    0    0    0    0    0    0    0    0    +     0     +     -----       -----       -----
                           +                                                          +           +
Teacher to Target        5 +    0    0    0    0    1    0    0    0    0    0    0    +     1     +     1.000       1.000       1.000
                           +                                                          +           +
Other Adult to Target    6 +    0    0    0    0    0    1    0    0    0    0    0    +     1     +     1.000        .500       1.000
                           +                                                          +           +
Student to Target        7 +    0    0    0    0    0    0    0    0    0    0    0    +     0     +     -----       0.000       -----
                           +                                                          +           +
Teacher to Group         8 +    0    0    0    0    0    0    0   10    0    0    1    +    11     +      .909        .917        .886
                           +                                                          +           +
Other Adult to Group     9 +    0    0    0    0    0    1    0    0    0    0    0    +     1     +     0.000       0.000       0.000
                           +                                                          +           +
Student to Group        10 +    0    0    0    0    0    0    0    0    0    0    0    +     0     +     -----       -----       -----
                           +                                                          +           +
None of the above       11 +    0    0    4    0    0    0    0    2    0    0   37    +    43     +      .860        .884        .619
                           +                                                          +           +
                           ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                           +                                                          +           +
          Marginal Totals  +    0    0    5    0    1    2    2   12    0    0   38    +    60     +
                           +                                                          +           +
                           ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


                               Category Marginal Agreement:  .887

                                    Cohen's Kappa:  .670
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Table 161

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                              Phase IV - IGE Evaluation Project                             Date: 06-25-79
                               Descriptive Study - Spring 1978                              Program: RELP95
                                                                                            Data File: RELD1
                                 Reliability on Interactions
                                 Observer 40   Expert 80
                                  School 801   Grade 2
                                    Week  0    Day 4
                                           DMP

                                   Category chosen by Observer 40                                                 Light's
Category chosen          Cat.                                                      Marginal   Nominal    Marginal   Extension
 by Expert 80             #     1   2   3   4   5   6   7   8   9  10  11          Totals   Agreement  Agreement   of Kappa

                           ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                           +                                                  +          +
Target to Teacher        1 +    0   0   0   0   1   0   0   0   0   0   0     +    1     +   0,000       ,500       -,024
                           +                                                  +          +
Target to Other Adult    2 +    0   0   0   0   0   0   0   0   0   0   0     +    0     +   -----       -----      -----
                           +                                                  +          +
Target to Student        3 +    0   0   1   0   0   0   0   0   0   0   0     +    1     +   1,000       ,167       1,000
                           +                                                  +          +
Target to Tchr & Grp     4 +    0   0   0   0   0   0   0   0   0   0   0     +    0     +   -----       -----      -----
                           +                                                  +          +
Teacher to Target        5 +    0   0   0   0   0   1   0   1   0   0   0     +    2     +   0,000       ,667       -,037
                           +                                                  +          +
Other Adult to Target    6 +    1   0   0   0   1   1   0   2   0   0   1     +    6     +    ,167       ,333        ,146
                           +                                                  +          +
Student to Target        7 +    0   0   1   0   0   0   1   0   0   0   0     +    2     +    ,500       ,667        ,481
                           +                                                  +          +
Teacher to Group         8 +    0   0   0   0   0   0   0   4   0   0   4     +    8     +    ,500       ,500        ,382
                           +                                                  +          +
Other Adult to Group     9 +    1   0   0   0   0   0   0   5   0   0   2     +    8     +   0,000      0,000       0,000
                           +                                                  +          +
Student to Group        10 +    0   0   0   0   0   0   0   0   0   0   0     +    0     +   -----       -----      -----
                           +                                                  +          +
None of the above       11 +    0   0   4   0   1   0   2   4   0   0  45     +   56     +    ,804       ,929        ,484
                           +                                                  +          +
                           ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                           +                                                  +          +
          Marginal Totals  +    2   0   6   0   3   2   3  16   0   0  52     +   84     +
                           +                                                  +          +
                           ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


                                Category Marginal Agreement:  ,470

                                      Cohen's Kappa:  ,358
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Table 162

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 20 Expert 80
School 801 Grade 2
Week 0 Day 4
DHP

Category chosen by Observer 20

Category chosen by Expert 80	Cat. #	1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	1	1	0.000	.200	-.063
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	1	0	0	0	0	0	0	0	0	1	1.000	.500	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	1	0	0	0	0	0	0	0	0	0	1	2	0.000	0.000	0.000
Other Adult to Target	6	3	0	0	0	0	0	0	0	0	0	3	6	0.000	0.000	0.000
Student to Target	7	0	0	1	0	0	0	0	0	0	0	1	2	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	4	0	0	4	8	.500	.800	.432
Other Adult to Group	9	1	0	0	0	0	0	0	3	0	0	4	8	0.000	0.000	0.000
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	0	0	0	0	0	3	0	0	53	56	.946	.836	.735
Marginal Totals		5	0	2	0	0	0	0	10	0	0	67	84			

Category Marginal Agreement: .292

Cohen's Kappa: .321

Table 163

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 30 Expert 90
School 801 Grade
Week 0 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	3	1	0	0	0	0	0	0	2	6	,500	1,000	,458
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Teacher to Target	5	0	0	0	0	1	0	0	1	0	0	0	2	,500	,500	,494
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	2	0	0	0	0	0	0	0	0	2	0,000	0,000	0,000
Teacher to Group	8	1	0	0	0	0	0	0	8	0	0	4	13	,615	,923	,545
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	1	0	1	1	0	0	0	3	0	0	49	55	,891	1,000	,630
Marginal Totals		2	0	6	2	1	0	0	12	0	0	55	78			

Category Marginal Agreement: ,489

Cohen's Kappa: ,537

Table 164

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 40 Expert 90
School 801 Grade 2
Week 0 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	4	0	0	0	1	0	0	0	1	6	.667	.833	.644
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	1	0	0	1	0	0	0	2	.500	1.000	.487
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	1	0	0	0	0	2	.500	1.000	.487
Teacher to Group	8	0	0	0	0	1	0	0	10	0	0	2	13	.769	1.000	.723
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	1	0	0	0	0	0	0	2	0	0	52	55	.945	1.000	.815
Marginal Totals		1	0	5	0	2	0	2	13	0	0	55	78			

Category Marginal Agreement: .806

Cohen's Kappa: .727

Table 165

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 10 Expert 90
School 801 Grade 5
Week 0 Day 5
DHP

Category chosen by Expert 90	Cat. #	1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		Category chosen by Observer 10														
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	1	1	0,000	,500	-,071
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	0	0	0	0	0	1	0,000	0,000	0,000
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
None of the above	11	0	0	1	0	0	0	0	0	0	0	25	26	,962	,929	,423
Marginal Totals		0	0	2	0	0	0	0	0	0	0	28	30			

Category Marginal Agreement: ,286

Cohen's Kappa: ,118

Table 166

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                              Phase IV - IOE Evaluation Project                              Date: 06-25-79
                               Descriptive Study - Spring 1978                               Program: RELP9S
                                                                                             Data File: RELD1
                                Reliability on Interactions
                                 Observer 20   Expert 90
                                  School 001   Grade 5
                                    Week  0    Day 5
                                           DMP


                                    Category chosen by Observer 20                                                           Light's
Category chosen          Cat.                                                                 Marginal   Nominal    Marginal   Extension
 by Expert 90             #     1    2    3    4    5    6    7    8    9   10   11           Totals   Agreement  Agreement   of Kappa

                             +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                             +                                                        +            +
Target to Teacher         1  +  0    0    0    0    0    0    0    0    0    0    0   +     0      +   -----      0.000      -----
                             +                                                        +            +
Target to Other Adult     2  +  0    0    0    0    0    0    0    0    0    0    0   +     0      +   -----      -----      -----
                             +                                                        +            +
Target to Student         3  +  0    0    0    0    0    0    0    0    0    0    1   +     1      +   0.000      1.000      -.034
                             +                                                        +            +
Target to Tchr & Grp      4  +  0    0    0    0    0    0    0    0    0    0    0   +     0      +   -----      -----      -----
                             +                                                        +            +
Teacher to Target         5  +  1    0    0    0    0    0    0    0    0    0    0   +     1      +   0.000      0.000      0.000
                             +                                                        +            +
Other Adult to Target     6  +  0    0    0    0    0    0    0    0    0    0    0   +     0      +   -----      -----      -----
                             +                                                        +            +
Student to Target         7  +  0    0    1    0    0    0    0    0    0    0    0   +     1      +   0.000      0.000      0.000
                             +                                                        +            +
Teacher to Group          8  +  0    0    0    0    0    0    0    0    0    0    0   +     0      +   -----      -----      -----
                             +                                                        +            +
Other Adult to Group      9  +  0    0    0    0    0    0    0    0    0    0    0   +     0      +   -----      -----      -----
                             +                                                        +            +
Student to Group         10  +  0    0    0    0    0    0    0    0    0    0    1   +     1      +   0.000      0.000      0.000
                             +                                                        +            +
None of the above        11  +  0    0    0    0    0    0    0    0    0    0   26   +    26      +   1.000       .929      1.000
                             +                                                        +            +
                             +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                             +                                                        +            +
            Marginal Totals  +  1    0    1    0    0    0    0    0    0    0   28   +    30      +
                             +                                                        +            +
                             +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


                                 Category Marginal Agreement:  .321

                                       Cohen's Kappa:  .298
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Table 167

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 30 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	2	0	0	1	3	.667	.667	.643
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
None of the above	11	0	0	0	0	0	0	0	0	0	1	25	26	.962	.963	.618
Marginal Totals		0	0	0	0	0	0	0	2	0	1	27	30			

Category Marginal Agreement: .407

Cohen's Kappa: .531

Table 168

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Interactions
Observer 40 Expert 80
School 801 Grade 5
Week 0 Day 5
DMP

Date: 06-25-79
Program: RELP95
Data File: RELD1

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	3	0	0	0	3	1.000	.600	1.000
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	1	1	0	0	0	2	0	0	22	26	.846	.885	.341
Marginal Totals		0	0	1	1	0	0	0	5	0	0	23	30			

Category Marginal Agreement: .897

Cohen's Kappa: .477

Table 169

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	1	1	0.000	1.000	-.019
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Teacher to Group	8	0	0	0	0	0	0	0	5	0	0	3	8	.625	.727	.529
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	1	0	1	0	1	6	0	0	36	45	.000	.889	.229
Marginal Totals		0	0	1	0	1	0	1	11	0	0	40	54			

Category Marginal Agreement: .523

Cohen's Kappa: .316

Table 170

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 20 Expert 90
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Group	8	0	0	0	0	0	0	0	1	0	0	7	8	.125	.125	.108
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	1	0	0	0	0	0	0	0	0	0	44	45	.978	.865	.400
Marginal Totals		1	0	0	0	0	0	0	1	0	0	52	54			

Category Marginal Agreement: .248

Cohen's Kappa: .144

Table 171

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 30 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	1	0	0	0	0	0	0	0	3	4	.250	.750	.206
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	1	1	0.000	1.000	-.019
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	2	0	0	0	0	2	1.000	1.000	1.000
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	1	0	2	1	1	0	0	1	0	0	41	47	.872	.957	.234
Marginal Totals		1	0	3	1	1	0	2	1	0	0	45	54			

Category Marginal Agreement: .530

Cohen's Kappa: .311

Table 172

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 40 Expert 80
School 801 Grade 2
Week 0 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	3	1	0	0	0	0	0	0	0	4	,750	1,000	,730
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	1	0	0	0	0	0	0	0	2	0,000	0,000	0,000
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	0	0	0	0	0	0	0	0	47	47	1,000	,979	1,000
Marginal Totals		0	0	4	2	0	0	0	0	0	0	48	54			

Category Marginal Agreement: ,396

Cohen's Kappa: ,665

Table 173

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 10 Expert 80
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	2	0	0	0	0	0	0	0	0	0	0	2	1,000	,667	1,000
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Target to Student	3	0	0	2	0	0	0	0	0	0	0	0	2	1,000	1,000	1,000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	1	0	1	2	0,000	0,000	0,000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Group	8	0	0	0	1	0	0	0	9	0	0	11	21	,429	,619	,314
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Student to Group	10	0	1	0	0	0	0	0	0	0	0	1	2	0,000	0,000	0,000
None of the above	11	1	0	0	0	0	0	0	4	0	0	44	49	,898	,860	,621
Marginal Totals		3	1	2	1	0	0	0	13	1	0	57	78			

Category Marginal Agreement: ,349

Cohen's Kappa: ,455

Table 174

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 20 Expert 80
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	2	0	0	0	0	0	0	0	0	0	0	2	1.000	.667	1.000
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	2	0	0	0	0	0	0	0	0	2	1.000	1.000	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	1	0	0	0	0	0	1	2	.500	1.000	.487
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Group	8	1	0	0	0	1	0	0	17	0	0	2	21	.810	.875	.725
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Student to Group	10	0	0	0	0	0	0	0	1	0	1	0	2	.500	.500	.494
None of the above	11	0	0	0	0	0	2	0	6	2	0	39	49	.796	.857	.558
Marginal Totals		3	0	2	0	2	2	0	24	2	1	42	78			

Category Marginal Agreement: .612

Cohen's Kappa: .644

Table 175

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 30   Expert 90
School 801   Grade 2
Week 0   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 30											Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7	8	9	10	11				
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
Target to Student	3	0	0	1	0	0	0	0	0	0	0	2	3	,333	,333	,253
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	2	0	0	0	0	0	2	4	,500	1,000	,475
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	8	0	2	0	2	0	0	0	63	75	,840	,920	,104
Marginal Totals		0	0	9	0	4	0	2	0	0	0	69	84			

Category Marginal Agreement: ,376

Cohen's Kappa: ,177

Table 176

Phase IV - IOE Evaluation Project
Descriptive Study - Spring [illegible]

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 10 Expert 90
School 801 Grade 2
Week 0 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	1	0	0	0	0	0	0	0	0	0	0	1	1,000	1,000	1,000
Target to Other Adult	2	0	0	0	0	0	0	0	1	0	0	0	1	0,000	0,000	0,000
Target to Student	3	0	0	1	0	0	0	0	0	0	0	2	3	,333	,500	,282
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	4	0	0	0	4	0,000	0,000	0,000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	5	0	0	0	1	0	0	0	69	75	,920	,947	,483
Marginal Totals		1	0	6	0	0	0	1	5	0	0	71	84			

Category Marginal Agreement: ,350

Cohen's Kappa: ,362

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11/79

Phase IV
Project Paper 79-25
Part 2 of 2 Parts

INTEROBSERVER AGREEMENT FOR THE OBSERVATION PROCEDURES FOR THE DMP AND WDRSD OBSERVERS DESCRIPTIVE STUDY

by Norman L. Webb

February 1980

Wisconsin Research
and Development Center
for Individualized Schooling

Phase IV

Project Paper 79-25
Part 2 of 2 Parts

INTEROBSERVER AGREEMENT FOR THE OBSERVATION PROCEDURES FOR THE DMP AND WDRSD OBSERVERS

DESCRIPTIVE STUDY

by

Norman L. Webb

Report from the
IGE Evaluation Project

Thomas A. Romberg
Work Group Chairman

Wisconsin Research and Development Center
for Individualized Schooling
The University of Wisconsin-Madison
Madison, Wisconsin

February 1980

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- developing and demonstrating improved instructional strategies, processes, and materials for students, teachers, and school administrators
- providing assistance to educators which helps transfer the outcomes of research and development to improved practice in local schools and teacher education institutions

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WISCONSIN RESEARCH AND DEVELOPMENT
CENTER FOR INDIVIDUALIZED SCHOOLING

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Abstract

This project paper reports the interobserver agreements and reliabilities for the observation procedures used in the Descriptive Study of Phase IV of the IGE Evaluation Project. Only data from observers at the two DMP and two WDRSD schools are reported in this paper. The four observers attended a four day training session, January 10-13 1978, to learn how to use the observation procedures. On March 16 and 17 a retraining session was held at the middle of the fourteen week investigative period to check on the interobserver agreements. In addition, on-site visits were made to each school by one of the Phase IV staff where both the observer and staff member did one or two observations together. Interobserver agreement and reliabilities were computed for each of these three situations -- training session, retraining session, and on-site visits. For each pair of observers and for each category, marginal agreements were computed. For the sets of categories--General Content, Pacing, Grouping, Materials, Learner Moves and Interactions -- Category Marginal Agreements and Cohen's Kappa were computed. Generalizability coefficients for estimates of reliability were computed for the training and retraining sessions for groups of three observers observing two or three classes for two days. The results indicated that there was high interobserver agreement at the three different check times on the categories of self-paced, other-paced, individual, large group, paper/pencil, engaged-written, engaged-covert, and non-engaged off task. The low interobserver agreements

were explained mainly as a result of a low frequency of occurrence. The generalizability coefficients for total engagement and total non-engagement were acceptable.

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Contingency Tables for each set of Observation Categories for Pairs of Observers for the WDRSD and DMP Training Session (March 16 and 17 1978)

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Table 177

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10   Expert 90
School 801   Grade 5
Week 9   Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	2	0	0	0	0	0	2	1.000	1.000	1.000
Management	3	0	0	1	0	0	0	0	1	1.000	1.000	1.000
Break	4	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	1	0	1	1.000	1.000	1.000
None of the Above	7	0	0	0	0	0	0	85	85	1.000	.988	1.000
Marginal Totals		0	2	1	0	0	1	86	90			

Category Marginal Agreement: .798

Cohen's Kappa: .885

Table 178

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 4
DHP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	2	0	0	0	0	0	2	1.000	.500	1.000
Management	3	0	1	0	0	0	0	0	1	0.000	0.000	0.000
Break	4	0	0	0	1	0	0	0	1	1.000	.333	1.000
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	1	0	0	0	0	0	1	0.000	0.000	0.000
None of the Above	7	0	0	0	2	0	0	83	85	.976	.976	.697
Marginal Totals		0	4	0	3	0	0	83	90			

Category Marginal Agreement: .362

Cohen's Kappa: .652

Table 179

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40 Expert 80
School R01 Grade 5
Week 9 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	3	0	0	0	0	0	4	7	.429	.429	.409
Transition	2	0	1	0	0	0	0	2	3	.333	.333	.326
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	2	0	2	1.000	1.000	1.000
None of the Above	7	0	0	0	0	0	0	78	78	1.000	.929	1.000
Marginal Totals		3	1	0	0	0	2	84	90			

Category Marginal Agreement: .673

Cohen's Kappa: .648

Table 180

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	0.000	-----
Transition	2	1	5	0	0	0	0	0	6	.833	1.000	.817
Management	3	0	0	0	0	0	0	4	4	0.000	0.000	0.000
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	1	0	1	0	0	54	56	.964	.966	.705
Marginal Totals		1	6	0	1	0	0	58	66			

Category Marginal Agreement: .393

Cohen's Kappa: .569

Table 182

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	6	0	0	0	0	0	6	1,000	,857	1,000
Management	3	0	0	1	0	0	0	3	4	,250	,500	,227
Break	4	0	0	0	0	0	0	0	0	-----	0,000	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	1	1	1	0	0	53	56	,946	1,000	,646
Marginal Totals		0	7	2	1	0	0	56	66			

Category Marginal Agreement: ,589

Cohen's Kappa: ,662

Table 181

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	3	0	0	0	0	0	0	3	1.000	1.000	1.000
Transition	2	0	0	0	0	0	0	0	0	-----	-----	-----
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	15	0	15	1.000	1.000	1.000
None of the Above	7	0	0	0	0	0	0	42	42	1.000	1.000	1.000
Marginal Totals		3	0	0	0	0	15	42	60			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 183

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	0.000	-----
Transition	2	1	4	0	0	0	0	0	5	.800	.800	.790
Management	3	0	0	2	0	0	0	0	2	1.000	.667	1.000
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	1	0	0	0	76	77	.987	.987	.864
Marginal Totals		1	4	3	0	0	0	76	84			

Category Marginal Agreement: .613

Cohen's Kappa: .857

Table 184

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20   Expert 90
School 801   Grade 2
Week 9   Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	5	0	0	0	0	0	5	1.000	1.000	1.000
Management	3	0	0	2	0	0	0	0	2	1.000	.667	1.000
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	1	0	0	0	76	77	.987	.987	.864
Marginal Totals		0	5	3	0	0	0	76	84			

Category Marginal Agreement: .885

Cohen's Kappa: .928

Table 185

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 80
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	1	0	0	0	0	0	0	1	1.000	1.000	1.000
Transition	2	0	0	0	0	0	0	0	0	-----	-----	-----
Management	3	0	0	0	0	0	0	2	2	0.000	0.000	0.000
Break	4	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	74	74	1.000	.961	1.000
Marginal Totals		1	0	0	0	0	0	77	78			

Category Marginal Agreement: .490

Cohen's Kappa: .392

Table 186

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	4	0	0	0	0	0	4	1.000	1.000	1.000
Management	3	0	0	5	0	0	0	1	6	.833	.833	.824
Break	4	0	0	0	2	0	0	1	3	.667	.667	.659
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	77	77	1.000	.975	1.000
Marginal Totals		0	4	5	2	0	0	79	90			

Category Marginal Agreement: .869

Cohen's Kappa: .908

Table 187

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	4	0	0	0	0	0	4	1.000	1.000	1.000
Management	3	0	0	6	0	0	0	0	6	1.000	1.000	1.000
Break	4	0	0	0	2	0	0	1	3	.667	.667	.659
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	77	77	1.000	.987	1.000
Marginal Totals		0	4	6	2	0	0	78	90			

Category Marginal Agreement: .913

Cohen's Kappa: .956

Table 188

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	88	88	1.000	.978	-----
Marginal Totals		0	0	0	0	0	0	90	90			

Category Marginal Agreement: .326

Cohen's Kappa: 0.000

Table 189

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	1	0	0	0	0	0	1	1.000	1.000	1.000
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	1	0	0	0	1	0.000	0.000	0.000
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	88	88	1.000	1.000	1.000
Marginal Totals		0	1	0	1	0	0	88	90			

Category Marginal Agreement: .500

Cohen's Kappa: .746

Table 190

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agrsement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	4	0	0	0	0	0	4	1.000	1.000	1.000
Management	3	0	0	3	0	0	0	0	3	1.000	1.000	1.000
Break	4	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	58	58	1.000	.983	1.000
Marginal Totals		0	4	3	0	0	0	59	66			

Category Marginal Agreement: .746

Cohen's Kappa: .927

Table 191

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	4	0	0	0	0	0	4	1.000	1.000	1.000
Management	3	0	0	3	0	0	0	0	3	1.000	1.000	1.000
Break	4	0	0	0	1	0	0	0	1	1.000	1.000	1.000
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	58	58	1.000	1.000	1.000
Marginal Totals		0	4	3	1	0	0	58	66			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 192

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30 Expert 80
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	2	0	0	0	0	2	4	.500	.500	.483
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	56	56	1.000	.966	1.000
Marginal Totals		0	2	0	0	0	0	58	60			

Category Marginal Agreement: .733

Cohen's Kappa: .651

Table 193

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
WDR5D

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	2	0	0	0	0	2	4	.500	.500	.483
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	56	56	1.000	.966	1.000
Marginal Totals		0	2	0	0	0	0	58	60			

Category Marginal Agreement: .733

Cohen's Kappa: .651

Table 194

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10   Expert 90
School 801   Grade 2
Week 9   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	4	0	0	0	0	1	5	.800	1.000	.787
Management	3	0	0	0	0	0	0	0	0	-----	0.000	-----
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	0	0	0	2	2	0.000	0.000	0.000
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	1	1	1	0	0	74	77	.961	1.000	.532
Marginal Totals		0	5	1	1	0	0	77	84			

Category Marginal Agreement: .400

Cohen's Kappa: .543

Table 195

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	5	0	0	0	0	0	5	1.000	.714	1.000
Management	3	0	0	0	0	0	0	0	0	-----	0.000	-----
Break	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Nonacademic	5	0	0	0	0	0	0	2	2	0.000	0.000	0.000
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	2	1	1	0	0	73	77	.948	.974	.815
Marginal Totals		0	7	1	1	0	0	75	84			

Category Marginal Agreement: .338

Cohen's Kappa: .596

Table 196

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	3	0	0	0	0	0	3	1.000	1.000	1.000
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	81	81	1.000	1.000	1.000
Marginal Totals		0	3	0	0	0	0	81	84			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 197

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	3	0	0	0	0	0	3	1.000	1.000	1.000
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	81	81	1.000	1.000	1.000
Marginal Totals		0	3	0	0	0	0	81	84			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 198

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                         Phase IV - IGE Evaluation Project
                         Descriptive Study - Spring 1978

                               Reliability on Pace
                             Observer 10   Expert 90
                              School 801   Grade 5
                                 Week  9   Day 4
                                        DMP


                          Category chosen
                          by Observer 10                                                Light's
Category chosen       Cat.                           Marginal    Nominal     Marginal    Extension
 by Expert 90          #      1     2     3           Totals    Agreement   Agreement    of Kappa

                          +++++++++++++++++++++++++++++
                          +                  +         +
     Self              1  +   78    4     0  +    82   +      .951        .988         .512
                          +                  +         +
     Other             2  +    2    1     0  +     3   +      .333        .600         .294
                          +                  +         +
     Neither           3  +    1    0     4  +     5   +      .800        .800         .791
                          +                  +         +
                          +++++++++++++++++++++++++++++
                          +                  +         +
        Marginal Totals   +   81    5     4  +    90   +
                          +                  +         +
                          +++++++++++++++++++++++++++++


                          Category Marginal Agreement:  .796

                                 Cohen's Kappa:  .557
```

Table 199

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20   Expert 90
School 801   Grade 5
Week 9   Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	80	0	2	82	.976	.988	.686
Other	2	3	0	0	3	0.000	0.000	0.000
Neither	3	0	0	5	5	1.000	.714	1.000
Marginal Totals		83	0	7	90			

Category Marginal Agreement: .567

Cohen's Kappa: .643

Table 200

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               Phase IV - IGE Evaluation Project
               Descriptive Study - Spring 1978

                     Reliability on Pace
                     Observer 40  Expert 80
                      School 801  Grade 5
                         Week  9  Day 4
                               DMP


                             Category chosen
                             by Observer 10                                                    Light's
Category chosen         Cat.                           Marginal    Nominal     Marginal      Extension
by Expert 80              #       1      2      3      Totals     Agreement   Agreement      of Kappa

                        +++++++++++++++++++++++++++
                        +                      +        +
      Self              1 +    27      2      0     +    29     +      .931        .879          .891
                        +                      +        +
      Other             2 +     4     45      0     +    49     +      .918        .961          .812
                        +                      +        +
      Neither           3 +     2      4      6     +    12     +      .500        .500          .464
                        +                      +        +
                        +++++++++++++++++++++++++++
                        +                      +        +
        Marginal Totals +    33     51      6     +    90     +
                        +                      +        +
                        +++++++++++++++++++++++++++


                    Category Marginal Agreement:  .780

                          Cohen's Kappa:  .764
```

Table 201

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10   Expert 90
School 801   Grade 2
Week 9   Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	6	2	0	8	.750	.875	.720
Other	2	0	46	0	46	1.000	.902	1.000
Neither	3	1	3	8	12	.667	.667	.621
Marginal Totals		7	51	8	66			

Category Marginal Agreement: .815

Cohen's Kappa: .787

Table 202

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Paca
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	6	1	1	8	.750	1.000	.716
Other	2	2	44	0	46	.957	.958	.841
Neither	3	0	3	9	12	.750	.833	.705
Marginal Totals		8	48	10	66			

Category Marginal Agreement: .931

Cohen's Kappa: .765

Table 203

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	5	0	0	5	1.000	.556	1.000
Other	2	4	33	0	37	.892	.892	.760
Neither	3	0	0	18	18	1.000	1.000	1.000
Marginal Totals		9	33	18	60			

Category Marginal Agreement: .816

Cohen's Kappa: .881

Table 204

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	64	5	1	70	.914	.957	.576
Other	2	3	4	0	7	.571	.778	.520
Neither	3	0	0	7	7	1.000	.875	1.000
Marginal Totals		67	9	8	84			

Category Marginal Agreement: .870

Cohen's Kappa: .664

Table 205

```
                        Phase IV - IGE Evaluation Project
                        Descriptive Study - Spring 1978

                             Reliability on Pace
                          Observer 20   Expert 90
                           School 801   Grade 2
                             Week  9    Day 4
                                    DMP


                              Category chosen
                              by Observer 20                                      Light's
 Category chosen        Cat.                      Marginal  Nominal    Marginal   Extension
  by Expert 90           #     1     2     3       Totals   Agreement  Agreement  of Kappa

                           ++++++++++++++++++++++++++
                           +                  +      +
      Self             1   +  69     0     1  +  70  +      .986       .959       .891
                           +                  +      +
      Other            2   +   4     3     0  +   7  +      .429       .429       .407
                           +                  +      +
      Neither          3   +   0     0     7  +   7  +     1.000       .875      1.000
                           +                  +      +
                           ++++++++++++++++++++++++++
                           +                  +      +
          Marginal Totals  +  73     3     8  +  84  +
                           +                  +      +
                           ++++++++++++++++++++++++++


                       Category Marginal Agreement:  .754

                              Cohen's Kappa:  .775
```

Table 206

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	43	1	0	44	.977	.846	.932
Other	2	8	22	0	30	.733	.833	.608
Neither	3	1	2	1	4	.250	.250	.240
Marginal Totals		52	25	1	78			

Category Marginal Agreement: .643

Cohen's Kappa: .692

Table 208

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	73	2	0	75	.973	.974	.815
Other	2	2	0	0	2	0.000	1.000	-.023
Neither	3	2	0	11	13	.846	.846	.825
Marginal Totals		77	2	11	90			

Category Marginal Agreement: .940

Cohen's Kappa: .752

Table 207

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	74	1	0	75	.987	.974	.908
Other	2	2	0	0	2	0.000	.500	-.011
Neither	3	1	0	12	13	.923	.923	.911
Marginal Totals		77	1	12	90			

Category Marginal Agreement: .799

Cohen's Kappa: .834

Table 209

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 30 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	28	10	0	38	.737	.763	.612
Other	2	0	50	0	50	1.000	.820	1.000
Neither	3	1	1	0	2	0.000	0.000	0.000
Marginal Totals		29	61	0	90			

Category Marginal Agreement: .528

Cohen's Kappa: .726

Table 210

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	35	3	0	38	.921	.950	.858
Other	2	5	45	0	50	.900	.960	.786
Neither	3	0	0	2	2	1.000	1.000	1.000
Marginal Totals		40	48	2	90			

Category Marginal Agreement: .970

Cohen's Kappa: .828

Table 211

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	23	1	1	25	.920	.781	.845
Other	2	9	24	0	33	.727	.758	.561
Neither	3	0	0	8	8	1.000	.889	1.000
Marginal Totals		32	25	9	66			

Category Marginal Agreement: .809

Cohen's Kappa: .727

Table 212

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20   Expert 90
School 801   Grade 2
Week 9   Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	23	2	0	25	.920	.735	.835
Other	2	11	22	0	33	.667	.727	.476
Neither	3	0	0	8	8	1.000	1.000	1.000
Marginal Totals		34	24	8	66			

Category Marginal Agreement: .821

Cohen's Kappa: .676

Table 213

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                    Phase IV - IGE Evaluation Project
                     Descriptive Study - Spring 1978

                         Reliability on Pace
                       Observer 30   Expert 80
                        School 801   Grade 2
                           Week  9   Day 5
                                WDRSD


                          Category chosen
                          by Observer 30                                           Light's
Category chosen      Cat.                          Marginal   Nominal    Marginal    Extension
 by Expert 80          #     1    2    3            Totals   Agreement  Agreement    of Kappa

                        ++++++++++++++++++++++++++++
                        +                  +        +
    Self              1 +  22    2    0    +   24   +    .917        .923        .853
                        +                  +        +
    Other             2 +   2   30    0    +   32   +    .938       1.000        .866
                        +                  +        +
    Neither           3 +   2    0    2    +    4   +    .500        .500        .483
                        +                  +        +
                        ++++++++++++++++++++++++++++
                        +                  +        +
        Marginal Totals +  26   32    2    +   60   +
                        +                  +        +
                        ++++++++++++++++++++++++++++


                        Category Marginal Agreement:  .808

                              Cohen's Kappa:  .815
```

Table 214

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1976

Reliability on Pace
Observer 40   Expert 80
School 801   Grade 2
Week 9   Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	24	0	0	24	1.000	.923	1.000
Other	2	0	32	0	32	1.000	1.000	1.000
Neither	3	2	0	2	4	.500	.500	.483
Marginal Totals		26	32	2	60			

Category Marginal Agreement: .808

Cohen's Kappa: .938

Table 215

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                          Reliability on Pace
                       Observer 10   Expert 90
                        School 801   Grade 2
                           Week  9   Day 5
                                DMP


                          Category chosen
                          by Observer 10                                                  Light's
Category chosen        Cat.                      Marginal    Nominal     Marginal    Extension
 by Expert 90           #      1    2    3       Totals    Agreement   Agreement    of Kappa

                         +++++++++++++++++++++++++++
                         +                  +        +
     Self              1 +    33    1    1  +    35  +     .943        .854         .888
                         +                  +        +
     Other             2 +     7   33    2  +    42  +     .786        .857         .625
                         +                  +        +
     Neither           3 +     1    2    4  +     7  +     .571       1.000         .532
                         +                  +        +
                         +++++++++++++++++++++++++++
                         +                  +        +
        Marginal Totals  +    41   36    7  +    84  +
                         +                  +        +
                         +++++++++++++++++++++++++++


                Category Marginal Agreement:  .904

                         Cohen's Kappa:  .710
```

267

Table 216

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	31	2	2	35	.886	.875	.782
Other	2	7	33	2	42	.786	.833	.633
Neither	3	2	0	5	7	.714	.778	.680
Marginal Totals		40	35	9	84			

Category Marginal Agreement: .829

Cohen's Kappa: .694

Table 217

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 30 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	47	12	3	62	.758	.774	.435
Other	2	1	18	0	19	.947	.633	.918
Neither	3	0	0	3	3	1.000	.500	1.000
Marginal Totals		48	30	6	84			

Category Marginal Agreement: .636

Cohen's Kappa: .615

Table 218

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	56	6	0	62	.903	.903	.710
Other	2	0	19	0	19	1.000	.760	1.000
Neither	3	0	0	3	3	1.000	1.000	1.000
Marginal Totals		56	25	3	84			

Category Marginal Agreement: .888

Cohen's Kappa: .837

Table 219

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10   Expert 90
School 801   Grade 5
Week 9   Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	61	2	3	0	0	66	.924	.917	.621
Pair	2	8	7	2	0	0	17	.412	.529	.346
Small Group (3-8)	3	2	0	0	0	0	2	0.000	.400	-.059
Large Group (>8)	4	0	0	0	0	0	0	-----	-----	-----
None of the above	5	1	0	0	0	4	5	.800	.800	.791
Marginal Totals		72	9	5	0	4	90			

Category Marginal Agreement: .662

Cohen's Kappa: .488

Table 220

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	59	4	1	0	2	66	.894	.943	.523
Pair	2	10	7	0	0	0	17	.412	.706	.321
Small Group (3-8)	3	1	1	0	0	0	2	0.000	.500	-.011
Large Group (>8)	4	0	0	0	0	0	0	-----	-----	-----
None of the above	5	0	0	0	0	5	5	1.000	.714	1.000
Marginal Totals		70	12	1	0	7	90			

Category Marginal Agreement: .716

Cohen's Kappa: .472

Table 221

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10   Expert 80
School 801   Grade 5
Week 9   Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	26	0	0	2	0	28	.929	.875	.889
Pair	2	2	0	0	0	0	2	0.000	.500	-.011
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	2	1	0	45	0	48	.938	.941	.856
None of the above	5	2	0	0	4	6	12	.500	.500	.464
Marginal Totals		32	1	0	51	6	90			

Category Marginal Agreement: .704

Cohen's Kappa: .750

Table 222

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	5	1	0	1	0	7	.714	.857	.686
Pair	2	0	2	0	0	0	2	1.000	.667	1.000
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	0	0	0	45	0	45	1.000	.918	1.000
None of the above	5	1	0	0	3	8	12	.667	.667	.621
Marginal Totals		6	3	0	49	8	66			

Category Marginal Agreement: .777

Cohen's Kappa: .803

Table 223

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20   Expert 90
School 801   Grade 2
Week 9   Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	3	2	0	1	1	7	.429	.571	.392
Pair	2	0	2	0	0	0	2	1.000	.500	1.000
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	1	0	0	44	0	45	.978	.938	.919
None of the above	5	0	0	0	3	9	12	.750	.833	.705
Marginal Totals		4	4	0	48	10	66			

Category Marginal Agreement: .711

Cohen's Kappa: .741

Table 224

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	5	0	0	0	0	5	1.000	.556	1.000
Pair	2	0	0	0	0	0	0	-----	-----	-----
Small Group (3-8)	3	4	0	33	0	0	37	.892	.892	.760
Large Group (>8)	4	0	0	0	0	0	0	-----	-----	-----
None of the above	5	0	0	0	0	18	18	1.000	1.000	1.000
Marginal Totals		9	0	33	0	18	60			

Category Marginal Agreement: .816

Cohen's Kappa: .881

Table 225

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	55	1	0	0	1	57	.965	.877	.845
Pair	2	6	5	0	0	0	11	.455	.636	.405
Small Group (3-8)	3	1	1	0	0	0	2	0.000	0.000	0.000
Large Group (>8)	4	3	0	0	4	0	7	.571	.571	.550
None of the above	5	0	0	0	0	7	7	1.000	.875	1.000
Marginal Totals		65	7	0	4	8	84			

Category Marginal Agreement: .592

Cohen's Kappa: .658

Table 226

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	52	4	0	0	1	57	,912	,934	,680
Pair	2	3	8	0	0	0	11	,727	,917	,682
Small Group (3-8)	3	2	0	0	0	0	2	0,000	0,000	0,000
Large Group (>8)	4	4	0	0	3	0	7	,429	,429	,407
None of the above	5	0	0	0	0	7	7	1,000	,875	1,000
Marginal Totals		61	12	0	3	8	84			

Category Marginal Agreement: ,631

Cohen's Kappa: ,651

Table 227

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	34	7	0	1	0	42	.810	.933	.550
Pair	2	2	0	0	0	0	2	0.000	.286	-.099
Small Group (3-8)	3	8	0	4	0	0	12	.333	.333	.297
Large Group (>8)	4	0	0	0	18	0	18	1.000	.857	1.000
None of the above	5	1	0	0	2	1	4	.250	.250	.240
Marginal Totals		45	7	4	21	1	78			

Category Marginal Agreement: .532

Cohen's Kappa: .563

Table 228

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10   Expert 90
School 801   Grade 5
Week 9   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	59	1	2	0	0	62	.952	.925	.811
Pair	2	4	3	0	0	0	7	.429	.857	.388
Small Group (3-8)	3	2	2	4	0	0	8	.500	.750	.464
Large Group (>8)	4	0	0	0	0	0	0	-----	-----	-----
None of the above	5	2	0	0	0	11	13	.846	.846	.825
Marginal Totals		67	6	6	0	11	90			

Category Marginal Agreement: .845

Cohen's Kappa: .685

Table 229

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	55	4	2	1	0	62	.887	.984	.650
Pair	2	4	3	0	0	0	7	.429	.778	.365
Small Group (3-8)	3	2	1	5	0	0	8	.625	.875	.593
Large Group (>8)	4	0	0	0	0	0	0	-----	0.000	-----
None of the above	5	0	1	0	0	12	13	.923	.923	.911
Marginal Totals		61	9	7	1	12	90			

Category Marginal Agreement: .712

Cohen's Kappa: .666

Table 230

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	22	4	0	5	0	31	.710	.742	.610
Pair	2	1	6	0	1	0	8	.750	.615	.708
Small Group (3-8)	3	0	2	0	0	0	2	0.000	0.000	0.000
Large Group (>8)	4	0	0	0	47	0	47	1.000	.870	1.000
None of the above	5	0	1	0	1	0	2	0.000	0.000	0.000
Marginal Totals		23	13	0	54	0	90			

Category Marginal Agreement: .446

Cohen's Kappa: .715

Table 231

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	28	0	0	3	0	31	.903	.775	.826
Pair	2	5	2	0	1	0	8	.250	.250	.233
Small Group (3-8)	3	2	0	0	0	0	2	0.000	0.000	0.000
Large Group (>8)	4	5	0	0	42	0	47	.894	.979	.782
None of the above	5	0	0	0	0	2	2	1.000	1.000	1.000
Marginal Totals		40	2	0	46	2	90			

Category Marginal Agreement: .601

Cohen's Kappa: .692

Table 232

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	16	0	0	1	1	18	.889	.750	.825
Pair	2	2	7	2	0	0	11	.636	.818	.579
Small Group (3-8)	3	1	0	0	0	0	1	0.000	.500	-.031
Large Group (>8)	4	5	2	0	21	0	28	.750	.786	.625
None of the above	5	0	0	0	0	8	8	1.000	.889	1.000
Marginal Totals		24	9	2	22	9	66			

Category Marginal Agreement: .749

Cohen's Kappa: .705

Table 233

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	13	1	2	2	0	18	,722	,857	,593
Pair	2	2	9	0	0	0	11	,818	,846	,774
Small Group (3-8)	3	0	0	1	0	0	1	1,000	,250	1,000
Large Group (>8)	4	6	3	1	18	0	28	,643	,714	,488
None of the above	5	0	0	0	0	8	8	1,000	1,000	1,000
Marginal Totals		21	13	4	20	8	66			

Category Marginal Agreement: ,734

Cohen's Kappa: ,650

Table 234

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30   Expert 80
School 801   Grade 2
Week 9   Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	21	0	0	0	0	21	1.000	.840	1.000
Pair	2	0	3	0	0	0	3	1.000	1.000	1.000
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	2	0	0	30	0	32	.938	.938	.875
None of the above	5	2	0	0	0	2	4	.500	.500	.483
Marginal Totals		25	3	0	30	2	60			

Category Marginal Agreement: .819

Cohen's Kappa: .886

Table 235

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	21	0	0	0	0	21	1.000	.913	1.000
Pair	2	0	3	0	0	0	3	1.000	1.000	1.000
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	0	0	0	32	0	32	1.000	1.000	1.000
None of the above	5	2	0	0	0	2	4	.500	.500	.483
Marginal Totals		23	3	0	32	2	60			

Category Marginal Agreement: .853

Cohen's Kappa: .942

Table 236

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	30	1	0	1	1	33	.909	.917	.841
Pair	2	0	5	0	0	0	5	1.000	.417	1.000
Small Group (3-8)	3	0	0	0	0	0	0	-----	0.000	-----
Large Group (>8)	4	5	6	0	26	2	39	.667	.692	.509
None of the above	5	1	0	2	0	4	7	.571	1.000	.532
Marginal Totals		36	12	2	27	7	84			

Category Marginal Agreement: .605

Cohen's Kappa: .661

Table 237

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	28	1	0	2	2	33	.848	.970	.755
Pair	2	0	4	1	0	0	5	.800	.833	.785
Small Group (3-8)	3	0	0	0	0	0	0	-----	0.000	-----
Large Group (>8)	4	4	1	0	32	2	39	.821	.872	.698
None of the above	5	0	0	2	0	5	7	.714	.778	.680
Marginal Totals		32	6	3	34	9	84			

Category Marginal Agreement: .691

Cohen's Kappa: .725

Table 238

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30   Expert 80
School 801   Grade 2
Week 9   Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	41	1	2	4	0	48	.854	.917	.694
Pair	2	3	9	0	0	0	12	.750	.917	.712
Small Group (3-8)	3	0	1	1	1	0	3	.333	1.000	.309
Large Group (>8)	4	0	0	0	18	0	18	1.000	.783	1.000
None of the above	5	0	0	0	0	3	3	1.000	1.000	1.000
Marginal Totals		44	11	3	23	3	84			

Category Marginal Agreement: .923

Cohen's Kappa: .770

Table 239

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	43	0	3	2	0	48	.896	1.000	.757
Pair	2	5	7	0	0	0	12	.583	.750	.533
Small Group (3-8)	3	0	2	0	1	0	3	0.000	1.000	-.037
Large Group (>8)	4	0	0	0	18	0	18	1.000	.857	1.000
None of the above	5	0	0	0	0	3	3	1.000	1.000	1.000
Marginal Totals		48	9	3	21	3	84			

Category Marginal Agreement: .921

Cohen's Kappa: .743

Table 240

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                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                         Reliability on Materials
                         Observer 10   Expert 90
                          School 801   Grade 5
                            Week  9    Day 4
                                  DMP


                        Material: Paper/pencil


                         Category chosen
                         by Observer 10                                            Light's
Category chosen      Cat.                          Marginal    Nominal     Marginal    Extension
 by Expert 90          #      1     2     3         Totals    Agreement   Agreement   of Kappa

                         +++++++++++++++++++++++++++
                         +                  +       +
     Used              1 +   61    21     0 +   82  +       .744        .756        .177
                         +                  +       +
     Not used          2 +    1     2     0 +    3  +       .667        .125        .545
                         +                  +       +
     Other             3 +    0     1     4 +    5  +       .800        .800        .791
                         +                  +       +
                         +++++++++++++++++++++++++++
                         +                  +       +
         Marginal Totals +   62    24     4 +   90  +
                         +                  +       +
                         +++++++++++++++++++++++++++


                  Category Marginal Agreement:  .560

                        Cohen's Kappa:  .292
```

Table 241

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                     Phase IV - IGE Evaluation Project
                      Descriptive Study - Spring 1978

                         Reliability on Materials
                          Observer 20   Expert 90
                           School 801   Grade 5
                              Week  9   Day 4
                                    DMP


                          Material: Paper/pencil


                        Category chosen
                        by Observer 20                                                     Light's
Category chosen       Cat.                             Marginal    Nominal     Marginal    Extension
by Expert 90           #      1     2     3             Totals     Agreement   Agreement   of Kappa

                       ++++++++++++++++++++++++++++++
                       +                   +        +
     Used            1 +     80     1     1   +    82   +     .976       1.000        .726
                       +                   +        +
     Not used        2 +      2     0     1   +     3   +    0.000        .333       -.011
                       +                   +        +
     Other           3 +      0     0     5   +     5   +    1.000        .714       1.000
                       +                   +        +
                       ++++++++++++++++++++++++++++++
                       +                   +        +
         Marginal Totals +   82     1     7   +    90   +
                       +                   +        +
                       ++++++++++++++++++++++++++++++


                  Category Marginal Agreement:  .683

                         Cohen's Kappa:  .664
```

Table 242

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 4
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	48	12	0	60	.800	.850	.538
Not used	2	2	16	0	18	.889	.545	.825
Other	3	1	5	6	12	.500	.500	.464
Marginal Totals		51	33	6	90			

Category Marginal Agreement: .632

Cohen's Kappa: .588

Table 243

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	9	1	0	10	.900	.833	.878
Not used	2	2	42	0	44	.955	.957	.850
Other	3	1	3	8	12	.667	.667	.621
Marginal Totals		12	46	8	66			

Category Marginal Agreement: .819

Cohen's Kappa: .782

Table 244

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	8	1	1	10	.800	.800	.772
Not used	2	0	44	0	44	1.000	.917	1.000
Other	3	0	3	9	12	.750	.833	.705
Marginal Totals		8	48	10	66			

Category Marginal Agreement: .850

Cohen's Kappa: .839

Table 245

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
WDRSD

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	25	0	0	25	1.000	.735	1.000
Not used	2	9	8	0	17	.471	.471	.389
Other	3	0	0	18	18	1.000	1.000	1.000
Marginal Totals		34	8	18	60			

Category Marginal Agreement: .735

Cohen's Kappa: .764

Table 246

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
DMP

Material: Paper/pencil

```
                              Category chosen
                              by Observer 40                                                Light's
Category chosen          Cat.                          Marginal    Nominal     Marginal     Extension
 by Expert 90             #      1      2      3        Totals    Agreement   Agreement    of Kappa

                           +++++++++++++++++++++++++++++
                           +                     +       +
     Used                1 +    76      0      1 +   77  +      .987         .987          .864
                           +                     +       +
     Not used            2 +     0      0      0 +    0  +     -----        -----         -----
                           +                     +       +
     Other               3 +     0      0      7 +    7  +     1.000         .875         1.000
                           +                     +       +
                           +++++++++++++++++++++++++++++
                           +                     +       +
         Marginal Totals   +    76      0      8 +   84  +
                           +                     +       +
                           +++++++++++++++++++++++++++++
```

Category Marginal Agreement: .931

Cohen's Kappa: .927

Table 247

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20   Expert 90
School 801   Grade 2
Week 9   Day 4
DMP

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	76	0	1	77	.987	.987	.864
Not used	2	0	0	0	0	-----	-----	-----
Other	3	0	0	7	7	1.000	.875	1.000
Marginal Totals		76	0	8	84			

Category Marginal Agreement: .931

Cohen's Kappa: .927

Table 248

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	46	1	0	47	.979	.979	.945
Not used	2	1	26	0	27	.963	.931	.941
Other	3	1	2	1	4	.250	.250	.240
Marginal Totals		48	29	1	78			

Category Marginal Agreement: .720

Cohen's Kappa: .872

Table 249

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	72	5	0	77	.935	.961	.635
Not used	2	0	0	0	0	-----	0.000	-----
Other	3	2	0	11	13	.846	.846	.825
Marginal Totals		74	5	11	90			

Category Marginal Agreement: .602

Cohen's Kappa: .721

Table 250

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	76	1	0	77	.987	1.000	.910
Not used	2	0	0	0	0	-----	0.000	-----
Other	3	1	0	12	13	.923	.923	.911
Marginal Totals		77	1	12	90			

Category Marginal Agreement: .641

Cohen's Kappa: .911

Table 251

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	75	1	0	76	.987	.884	.704
Not used	2	10	2	0	12	.167	.333	.128
Other	3	1	1	0	2	0.000	0.000	0.000
Marginal Totals		86	4	0	90			

Category Marginal Agreement: .406

Cohen's Kappa: .228

Table 252

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	71	5	0	76	.934	.934	.688
Not used	2	0	12	0	12	1.000	.706	1.000
Other	3	0	0	2	2	1.000	1.000	1.000
Marginal Totals		71	17	2	90			

Category Marginal Agreement: .880

Cohen's Kappa: .820

Table 253

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10   Expert 90
School 801   Grade 2
Week 9   Day 5
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	24	16	1	41	.585	.585	.348
Not used	2	0	17	0	17	1.000	.515	1.000
Other	3	0	0	8	8	1.000	.889	1.000
Marginal Totals		24	33	9	66			

Category Marginal Agreement: .663

Cohen's Kappa: .590

Table 254

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	37	4	0	41	.902	.976	.752
Not used	2	3	14	0	17	.824	.944	.757
Other	3	0	0	8	8	1.000	1.000	1.000
Marginal Totals		40	18	8	66			

Category Marginal Agreement: .973

Cohen's Kappa: .803

Table 255

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30   Expert 80
School 801   Grade 2
Week 9   Day 5
WDRSD

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	51	0	0	51	1.000	.962	1.000
Not used	2	0	5	0	5	1.000	1.000	1.000
Other	3	2	0	2	4	.500	.500	.483
Marginal Totals		53	5	2	60			

Category Marginal Agreement: .821

Cohen's Kappa: .861

Table 256

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
WDRSD

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	51	0	0	51	1.000	.944	1.000
Not used	2	1	4	0	5	.800	.800	.786
Other	3	2	0	2	4	.500	.500	.483
Marginal Totals		54	4	2	60			

Category Marginal Agreement: .748

Cohen's Kappa: .780

Table 257

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10   Expert 90
School 801   Grade 2
Week 9   Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	40	5	2	47	.851	.894	.702
Not used	2	1	28	1	30	.933	.857	.886
Other	3	1	2	4	7	.571	1.000	.532
Marginal Totals		42	35	7	84			

Category Marginal Agreement: .917

Cohen's Kappa: .747

Table 258

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	43	1	3	47	.915	.940	.790
Not used	2	6	23	1	30	.767	.833	.668
Other	3	1	1	5	7	.714	.778	.680
Marginal Totals		50	25	9	84			

Category Marginal Agreement: .850

Cohen's Kappa: .719

Table 259

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                        Reliability on Materials
                        Observer 30   Expert 80
                         School 801   Grade 2
                           Week  9    Day 5
                                 DMP


                        Material: Paper/pencil


                       Category chosen
                       by Observer 30                                                  Light's
Category chosen        Cat.                     Marginal   Nominal    Marginal   Extension
 by Expert 80           #      1     2     3      Totals   Agreement  Agreement  of Kappa

                        +++++++++++++++++++++++++++++++
                        +                    +         +
     Used             1 +    63     3     0  +    66   +     .955       .955       .818
                        +                    +         +
     Not used         2 +     0    15     0  +    15   +    1.000       .833      1.000
                        +                    +         +
     Other            3 +     0     0     3  +     3   +    1.000      1.000      1.000
                        +                    +         +
                        +++++++++++++++++++++++++++++++
                        +                    +         +
        Marginal Totals +    63    18     3  +    84   +
                        +                    +         +
                        +++++++++++++++++++++++++++++++


                  Category Marginal Agreement:  .929

                         Cohen's Kappa:  .904
```

Table 260

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	66	0	0	66	1.000	.971	1.000
Not used	2	2	13	0	15	.867	.867	.842
Other	3	0	0	3	3	1.000	1.000	1.000
Marginal Totals		68	13	3	84			

Category Marginal Agreement: .946

Cohen's Kappa: .929

Table 261

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10   Expert 90
School 801   Grade 5
Week 9   Day 4
DMP

Material: Manipulative

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	4	0	4	0.000	.250	-.011
Not used	2	1	80	0	81	.988	.953	.778
Other	3	0	1	4	5	.800	.800	.791
Marginal Totals		1	85	4	90			

Category Marginal Agreement: .668

Cohen's Kappa: .547

Table 262

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 4
DMP

Material: Manipulative

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	4	0	4	0.000	0.000	0.000
Not used	2	0	79	2	81	.975	.976	.683
Other	3	0	0	5	5	1.000	.714	1.000
Marginal Totals		0	83	7	90			

Category Marginal Agreement: .563

Cohen's Kappa: .598

Table 263

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 4
DMP

Material: Manipulative

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	15	0	0	15	1.000	.405	1.000
Not used	2	18	45	0	63	.714	.746	.402
Other	3	4	2	6	12	.500	.500	.464
Marginal Totals		37	47	6	90			

Category Marginal Agreement: .550

Cohen's Kappa: .521

Table 264

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
DMP

Material: Manipulative

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	9	0	9	0.000	.111	-.013
Not used	2	1	64	0	65	.985	.855	.400
Other	3	0	3	1	4	.250	.250	.240
Marginal Totals		1	76	1	78			

Category Marginal Agreement: .405

Cohen's Kappa: .103

Table 265

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Material: Manipulative

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	0	0	0	-----	0.000	-----
Not used	2	2	75	0	77	.974	1.000	.820
Other	3	0	2	11	13	.846	.846	.825
Marginal Totals		2	77	11	90			

Category Marginal Agreement: .615

Cohen's Kappa: .822

Table 266

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Material: Manipulative

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	10	2	0	12	.833	.480	.769
Not used	2	14	62	0	76	.816	.855	.337
Other	3	1	1	0	2	0.000	0.000	0.000
Marginal Totals		25	65	0	90			

Category Marginal Agreement: .445

Cohen's Kappa: .434

Table 267

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Material: Manipulative

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	7	5	0	12	.583	.667	.543
Not used	2	1	75	0	76	.987	.950	.882
Other	3	0	0	2	2	1.000	1.000	1.000
Marginal Totals		8	80	2	90			

Category Marginal Agreement: .872

Cohen's Kappa: .719

Table 268

```
                    Phase IV - IGE Evaluation Project
                    Descriptive Study - Spring 1978

                        Reliability on Materials
                        Observer 30   Expert 80
                         School 801   Grade 2
                            Week  9   Day 5
                                  WDRSD


                        Material: Manipulative


                         Category chosen
                         by Observer 30                                                Light's
Category chosen      Cat.                        Marginal    Nominal    Marginal    Extension
 by Expert 80         #       1     2     3       Totals    Agreement   Agreement    of Kappa

                        +++++++++++++++++++++++++++
                        +                 +       +
    Used              1 +    53     3     0 +    56   +      .946        .982         .357
                        +                 +       +
    Not used          2 +     0     0     0 +     0   +      -----       0.000        -----
                        +                 +       +
    Other             3 +     2     0     2 +     4   +      .500        .500         .483
                        +                 +       +
                        +++++++++++++++++++++++++++
                        +                 +       +
       Marginal Totals  +    55     3     2 +    60   +
                        +                 +       +
                        +++++++++++++++++++++++++++


                   Category Marginal Agreement:  .494

                       Cohen's Kappa:  .414
```

Table 269

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                      Phase IV - IGE Evaluation Project
                      Descriptive Study - Spring 1978

                         Reliability on Materials
                         Observer 40   Expert 80
                          School 801   Grade 2
                             Week  9   Day 5
                                 WDRSD


                         Material: Manipulative


                           Category chosen
                           by Observer 40                                             Light's
Category chosen      Cat.                        Marginal   Nominal    Marginal    Extension
 by Expert 80         #      1     2     3       Totals    Agreement   Agreement    of Kappa

                       +++++++++++++++++++++++++++++
                       +                     +       +
    Used             1 +    45    11     0   +   56  +    .804        .804         .214
                       +                     +       +
    Not used         2 +     0     0     0   +    0  +    -----       0.000        -----
                       +                     +       +
    Other            3 +     0     2     2   +    4  +    .500        .500         .483
                       +                     +       +
                       +++++++++++++++++++++++++++++
                       +                     +       +
        Marginal Totals +    45    13     2   +   60  +
                       +                     +       +
                       +++++++++++++++++++++++++++++


                     Category Marginal Agreement:  .435

                          Cohen's Kappa:  .272
```

Table 270

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Material: Manipulative

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	0	0	0	-----	0.000	-----
Not used	2	1	73	3	77	.948	.987	.455
Other	3	0	3	4	7	.571	1.000	.532
Marginal Totals		1	76	7	84			

Category Marginal Agreement: .662

Cohen's Kappa: .491

Table 271

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Material: Manipulative

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	1	0	1	0.000	0.000	0.000
Not used	2	0	80	0	80	1.000	.988	1.000
Other	3	0	0	3	3	1.000	1.000	1.000
Marginal Totals		0	81	3	84			

Category Marginal Agreement: .663

Cohen's Kappa: .852

Table 272

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Material: Manipulative

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	1	0	0	1	1.000	1.000	1.000
Not used	2	0	80	0	80	1.000	1.000	1.000
Other	3	0	0	3	3	1.000	1.000	1.000
Marginal Totals		1	80	3	84			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 273

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 4
DMP

Material: Game

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	4	0	4	0.000	0.000	0.000
Not used	2	0	74	0	74	1.000	.881	1.000
Other	3	0	6	6	12	.500	.500	.464
Marginal Totals		0	84	6	90			

Category Marginal Agreement: .460

Cohen's Kappa: .503

Table 274

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Material: Game

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	33	1	34	0.000	0.000	0.000
Not used	2	0	41	2	43	.953	.558	.442
Other	3	0	3	4	7	.571	1.000	.532
Marginal Totals		0	77	7	84			

Category Marginal Agreement: .519

Cohen's Kappa: .114

Table 275

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Material: Game

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	33	1	34	0.000	0.000	0.000
Not used	2	0	40	3	43	.930	.573	.349
Other	3	0	2	5	7	.714	.778	.680
Marginal Totals		0	75	9	84			

Category Marginal Agreement: .450

Cohen's Kappa: .131

Table 276

```
                              Phase IV - IGE Evaluation Project
                               Descriptive Study - Spring 1978

                                  Reliability on Materials
                                   Observer 30   Expert 80
                                    School 801   Grade 2
                                       Week  9   Day 5
                                             DMP


                                       Material: Game



                            Category chosen
                            by Observer 30                                                Light's
  Category chosen     Cat.                         Marginal    Nominal     Marginal     Extension
   by Expert 80        #      1     2     3         Totals    Agreement   Agreement     of Kappa

                        ++++++++++++++++++++++++++++
                        +                   +         +
       Used           1 +     8     0     0 +     8   +      1.000        .800         1.000
                        +                   +         +
       Not used       2 +     2    71     0 +    73   +       .973        .973          .823
                        +                   +         +
       Other          3 +     0     0     3 +     3   +      1.000       1.000         1.000
                        +                   +         +
                        ++++++++++++++++++++++++++++
                        +                   +         +
          Marginal Totals +  10    71     3 +    84   +
                        +                   +         +
                        ++++++++++++++++++++++++++++


                        Category Marginal Agreement:  .924

                               Cohen's Kappa:  .906
```

Table 277

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Material: Game

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	6	2	0	8	.750	.750	.731
Not used	2	0	73	0	73	1.000	.973	1.000
Other	3	0	0	3	3	1.000	1.000	1.000
Marginal Totals		6	75	3	84			

Category Marginal Agreement: .908

Cohen's Kappa: .890

Table 278

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Material: Audio/visual aid

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	0	0	0	-----	0.000	-----
Not used	2	3	55	0	58	.948	.948	.690
Other	3	0	0	8	8	1.000	1.000	1.000
Marginal Totals		3	55	8	66			

Category Marginal Agreement: .649

Cohen's Kappa: .820

Table 279

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10   Expert 90
School 801   Grade 5
Week 9   Day 4
DMP

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	8	3	0	11	.727	1.000	.689
Not used	2	2	72	0	74	.973	.987	.838
Other	3	1	0	4	5	.800	.800	.791
Marginal Totals		11	75	4	90			

Category Marginal Agreement: .929

Cohen's Kappa: .776

Table 280

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 4
DMP

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	7	4	0	11	.636	.727	.601
Not used	2	1	71	2	74	.959	.987	.757
Other	3	0	0	5	5	1.000	.714	1.000
Marginal Totals		8	75	7	90			

Category Marginal Agreement: .809

Cohen's Kappa: .740

Table 281

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 4
DMP

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	14	0	0	14	1.000	.737	1.000
Not used	2	5	59	0	64	.922	.985	.719
Other	3	0	6	6	12	.500	.500	.464
Marginal Totals		19	65	6	90			

Category Marginal Agreement: .740

Cohen's Kappa: .725

Table 282

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
WDRSD

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	8	9	0	17	.471	.471	.389
Not used	2	0	25	0	25	1.000	.735	1.000
Other	3	0	0	18	18	1.000	1.000	1.000
Marginal Totals		8	34	18	60			

Category Marginal Agreement: .735

Cohen's Kappa: .764

Table 283

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
DMP

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	6	1	0	7	.857	.875	.841
Not used	2	2	65	0	67	.970	.971	.741
Other	3	0	3	1	4	.250	.250	.240
Marginal Totals		8	69	1	78			

Category Marginal Agreement: .699

Cohen's Kappa: .666

Table 284

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	1	0	1	0.000	.100	-.125
Not used	2	10	66	0	76	.868	.908	.436
Other	3	0	2	11	13	.846	.846	.825
Marginal Totals		10	69	11	90			

Category Marginal Agreement: .618

Cohen's Kappa: .567

Table 285

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 5
DMP

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	1	0	1	0.000	0.000	0.000
Not used	2	0	76	0	76	1.000	.974	1.000
Other	3	0	1	12	13	.923	.923	.911
Marginal Totals		0	78	12	90			

Category Marginal Agreement: .632

Cohen's Kappa: .911

Table 286

```
                        Phase IV - IGE Evaluation Project
                        Descriptive Study - Spring 1978

                           Reliability on Materials
                            Observer 30   Expert 80
                             School 801   Grade 5
                                Week  9   Day 5
                                     DMP


                         Material: Printed material



                       Category chosen
                       by Observer 30                                            Light's
Category chosen       Cat.                     Marginal  Nominal    Marginal    Extension
 by Expert 80          #     1     2     3      Totals   Agreement  Agreement   of Kappa

                      ++++++++++++++++++++++++++++++
                      +                   +         +
     Used            1 +   13     1     0  +   14    +    .929        .933        .914
                      +                   +         +
     Not used        2 +    2    72     0  +   74    +    .973        .987        .838
                      +                   +         +
     Other           3 +    0     2     0  +    2    +   0.000       0.000       0.000
                      +                   +         +
                      ++++++++++++++++++++++++++++++
                      +                   +         +
        Marginal Totals +   15    75     0  +   90    +
                      +                   +         +
                      ++++++++++++++++++++++++++++++


                    Category Marginal Agreement:  .640

                           Cohen's Kappa:  .808
```

Table 287

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	12	2	0	14	.857	.929	.833
Not used	2	1	73	0	74	.986	.987	.919
Other	3	0	0	2	2	1.000	1.000	1.000
Marginal Totals		13	75	2	90			

Category Marginal Agreement: .972

Cohen's Kappa: .886

Table 288

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	10	4	0	14	.714	.714	.663
Not used	2	0	43	1	44	.977	.936	.921
Other	3	0	0	8	8	1.000	.889	1.000
Marginal Totals		10	47	9	66			

Category Marginal Agreement: .846

Cohen's Kappa: .841

Table 289

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	14	0	14	0.000	0.000	0.000
Not used	2	0	44	0	44	1.000	.759	1.000
Other	3	0	0	8	8	1.000	1.000	1.000
Marginal Totals		0	58	8	66			

Category Marginal Agreement: .586

Cohen's Kappa: .469

Table 290

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                     Phase IV - IGE Evaluation Project
                     Descriptive Study - Spring 1978

                         Reliability on Materials
                         Observer 10   Expert 90
                         School 801    Grade 2
                            Week  9    Day 5
                                  DMP


                      Material: Printed material


                          Category chosen
                          by Observer 10                                          Light's
 Category chosen     Cat.                          Marginal   Nominal    Marginal    Extension
 by Expert 90         #     1    2    3         Totals    Agreement  Agreement   of Kappa

                       ++++++++++++++++++++++++++++
                       +                  +        +
      Used          1  +    0    1    0   +    1   +    0.000      0.000       0.000
                       +                  +        +
      Not used      2  +    0   73    3   +   76   +    .961       .987        .526
                       +                  +        +
      Other         3  +    0    3    4   +    7   +    .571      1.000        .532
                       +                  +        +
                       ++++++++++++++++++++++++++++
                       +                  +        +
        Marginal Totals +   0   77    7   +   84   +
                       +                  +        +
                       ++++++++++++++++++++++++++++


                Category Marginal Agreement:  .662

                      Cohen's Kappa:  .491
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Table 291

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	1	0	1	0.000	0.000	0.000
Not used	2	0	72	4	76	.947	.987	.509
Other	3	0	2	5	7	.714	.778	.680
Marginal Totals		0	75	9	84			

Category Marginal Agreement: .588

Cohen's Kappa: .545

Table 292

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 5
Week 9 Day 4
DMP

Material: Other

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	11	1	0	12	.917	.917	.905
Not used	2	0	73	0	73	1.000	.973	1.000
Other	3	0	1	4	5	.800	.800	.791
Marginal Totals		11	75	4	90			

Category Marginal Agreement: .897

Cohen's Kappa: .927

Table 293

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 4
DMP

Material: Other

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	11	1	0	12	.917	.923	.903
Not used	2	2	69	2	73	.945	.959	.753
Other	3	0	0	5	5	1.000	.714	1.000
Marginal Totals		13	70	7	90			

Category Marginal Agreement: .865

Cohen's Kappa: .839

Table 294

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
DMP

Material: Other

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	2	0	0	2	1.000	1.000	1.000
Not used	2	0	72	0	72	1.000	.960	1.000
Other	3	0	3	1	4	.250	.250	.240
Marginal Totals		2	75	1	78			

Category Marginal Agreement: .737

Cohen's Kappa: .654

Table 295

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10   Expert 90
School 801   Grade 5
Week 9   Day 5
DMP

Material: Other

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	2	4	0	6	.333	.333	.318
Not used	2	0	71	0	71	1.000	.922	1.000
Other	3	0	2	11	13	.846	.846	.825
Marginal Totals		2	77	11	90			

Category Marginal Agreement: .701

Cohen's Kappa: .782

Table 296

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20   Expert 90
School 801   Grade 5
Week 9   Day 5
DMP

Material: Other

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	6	0	6	0.000	0.000	0.000
Not used	2	0	71	0	71	1.000	.910	1.000
Other	3	0	1	12	13	.923	.923	.911
Marginal Totals		0	78	12	90			

Category Marginal Agreement: .611

Cohen's Kappa: .738

Table 297

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Material: Other

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	1	0	1	0.000	1.000	-.013
Not used	2	1	55	1	57	.965	.982	.768
Other	3	0	0	8	8	1.000	.889	1.000
Marginal Totals		1	56	9	66			

Category Marginal Agreement: .957

Cohen's Kappa: .819

Table 298

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Material: Other

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	1	0	1	0.000	0.000	0.000
Not used	2	0	57	0	57	1.000	.983	1.000
Other	3	0	0	8	8	1.000	1.000	1.000
Marginal Totals		0	58	8	66			

Category Marginal Agreement: .661

Cohen's Kappa: .933

Table 299

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10   Expert 90
School 801   Grade 2
Week 9   Day 5
DMP

Material: Other

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	1	0	0	1	1.000	.500	1.000
Not used	2	1	72	3	76	.947	.987	.509
Other	3	0	3	4	7	.571	1.000	.532
Marginal Totals		2	75	7	84			

Category Marginal Agreement: .829

Cohen's Kappa: .549

Table 300

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Material: Other

		Category chosen by Observer 20						
Category chosen by Expert 90	Cat. #	1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	1	0	1	0.000	1.000	-.012
Not used	2	1	71	4	76	.934	.974	.447
Other	3	0	2	5	7	.714	.778	.680
Marginal Totals		1	74	9	84			

Category Marginal Agreement: .917

Cohen's Kappa: .509

Table 301

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Material: Other

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	1	0	1	0.000	0.000	0.000
Not used	2	0	80	0	80	1.000	.988	1.000
Other	3	0	0	3	3	1.000	1.000	1.000
Marginal Totals		0	81	3	84			

Category Marginal Agreement: .663

Cohen's Kappa: .852

Table 302

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Material: Other

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	1	0	0	1	1.000	1.000	1.000
Not used	2	0	80	0	80	1.000	1.000	1.000
Other	3	0	0	3	3	1.000	1.000	1.000
Marginal Totals		1	80	3	84			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 303

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10   Expert 90
School 801   Grade 5
Week 9   Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	21	1	7	0	0	0	0	29	.724	.897	.612
Engaged - oral	2	0	3	1	1	1	2	0	8	.375	.750	.330
Engaged - covert	3	5	1	5	2	0	2	0	15	.333	.789	.155
Not engaged - interim	4	0	0	2	12	0	1	0	15	.800	.882	.753
Not engaged - waiting	5	0	1	1	0	0	1	0	3	0.000	.333	-.011
Not engaged -off task	6	0	0	3	1	0	11	0	15	.733	.882	.671
None of the above	7	0	0	0	1	0	0	4	5	.800	.800	.791
Marginal Totals		26	6	19	17	1	17	4	90			

Category Marginal Agreement: .762

Cohen's Kappa: .528

Table 304

Phase IV - ISE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	22	0	6	0	0	1	0	29	.759	.897	.661
Engaged - oral	2	0	4	0	0	2	2	0	8	.500	1.000	.451
Engaged - covert	3	3	3	8	1	0	0	0	15	.533	.882	.425
Not engaged - interim	4	0	0	1	12	0	1	1	15	.800	.833	.750
Not engaged - waiting	5	0	0	1	1	1	0	0	3	.333	1.000	.310
Not engaged -off task	6	1	1	1	4	0	7	1	15	.467	.733	.392
None of the above	7	0	0	0	0	0	0	5	5	1.000	.714	1.000
Marginal Totals		26	8	17	18	3	11	7	90			

Category Marginal Agreement: .866

Cohen's Kappa: .574

Table 305

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	13	0	1	1	0	0	0	15	.867	.938	.838
Engaged - oral	2	0	2	0	0	0	0	0	2	1.000	.500	1.000
Engaged - covert	3	1	1	22	0	4	2	0	30	.733	.900	.619
Not engaged - interim	4	0	0	0	2	1	0	0	3	.667	.750	.651
Not engaged - waiting	5	0	0	4	0	11	0	0	15	.733	.682	.647
Not engaged -off task	6	2	1	0	0	1	9	0	13	.692	.846	.649
None of the above	7	0	0	0	1	5	0	6	12	.500	.500	.464
Marginal Totals		16	4	27	4	22	11	6	90			

Category Marginal Agreement: .731

Cohen's Kappa: .653

Table 306

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	3	0	1	0	0	0	0	4	,750	1,000	,734
Engaged - oral	2	0	3	2	1	0	0	0	6	,500	,667	,468
Engaged - covert	3	1	1	32	0	2	2	0	38	,842	,974	,614
Not engaged - interim	4	0	0	0	0	0	0	0	0	-----	0,000	-----
Not engaged - waiting	5	0	0	0	0	0	0	0	0	-----	0,000	-----
Not engaged -off task	6	0	0	2	1	0	3	0	6	,500	,833	,459
None of the above	7	0	0	2	1	1	0	8	12	,667	,667	,621
Marginal Totals		4	4	39	3	3	5	8	66			

Category Marginal Agreement: ,598

Cohen's Kappa: ,586

Table 307

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	3	0	0	0	0	0	1	4	.750	.750	.738
Engaged - oral	2	0	4	1	1	0	0	0	6	.667	1.000	.633
Engaged - covert	3	0	2	34	0	1	1	0	38	.895	1.000	.752
Not engaged - interim	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Not engaged - waiting	5	0	0	0	0	0	0	0	0	-----	0.000	-----
Not engaged -off task	6	0	0	3	0	0	3	0	6	.500	.857	.441
None of the above	7	0	0	0	0	0	3	9	12	.750	.833	.705
Marginal Totals		3	6	38	1	1	7	10	66			

Category Marginal Agreement: .634

Cohen's Kappa: .682

Table 308

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	8	0	2	0	0	0	0	10	.800	1.000	.760
Engaged - oral	2	1	3	1	0	0	0	0	5	.600	.600	.579
Engaged - covert	3	1	0	12	2	2	0	0	17	.706	.941	.599
Not engaged - interim	4	0	0	0	3	0	0	0	3	1.000	.600	1.000
Not engaged - waiting	5	0	0	1	0	6	0	0	7	.857	.875	.835
Not engaged -off task	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	7	0	0	0	0	0	0	18	18	1.000	1.000	1.000
Marginal Totals		10	3	16	5	8	0	18	60			

Category Marginal Agreement: .836

Cohen's Kappa: .787

Table 309

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 90
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	12	0	12	0	1	0	0	25	.480	.760	.328
Engaged - oral	2	1	1	3	0	0	0	0	5	.200	.800	.160
Engaged - covert	3	5	2	10	0	1	2	1	21	.476	.778	.228
Not engaged - interim	4	0	0	0	3	0	0	0	3	1.000	1.000	1.000
Not engaged - waiting	5	1	0	1	0	5	1	0	8	.625	.727	.568
Not engaged -off task	6	0	1	1	0	4	9	0	15	.600	.800	.533
None of the above	7	0	0	0	0	0	0	7	7	1.000	.875	1.000
Marginal Totals		19	4	27	3	11	12	8	84			

Category Marginal Agreement: .820

Cohen's Kappa: .451

Table 310

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20   Expert 90
School 801   Grade 2
Week 9   Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	19	1	3	0	0	2	0	25	.760	1.000	.658
Engaged - oral	2	0	4	0	0	0	1	0	5	.800	.714	.782
Engaged - covert	3	5	1	11	0	1	2	1	21	.524	.810	.403
Not engaged - interim	4	0	0	0	3	0	0	0	3	1.000	.750	1.000
Not engaged - waiting	5	1	0	1	1	5	0	0	8	.625	.889	.580
Not engaged -off task	6	0	1	2	0	3	9	0	15	.600	.933	.520
None of the above	7	0	0	0	0	0	0	7	7	1.000	.875	1.000
Marginal Totals		25	7	17	4	9	14	8	84			

Category Marginal Agreement: .853

Cohen's Kappa: .616

Table 311

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	8	0	2	1	0	2	0	13	.615	1.000	.538
Engaged - oral	2	0	3	1	0	0	0	0	4	.750	.333	.705
Engaged - covert	3	4	8	18	0	5	2	1	38	.474	.632	.240
Not engaged - interim	4	0	0	1	3	2	0	0	6	.500	.833	.466
Not engaged - waiting	5	1	1	0	0	3	2	0	7	.429	.700	.345
Not engaged -off task	6	0	0	0	1	0	5	0	6	.833	.500	.803
None of the above	7	0	0	2	0	0	1	1	4	.250	.500	.230
Marginal Totals		13	12	24	5	10	12	2	78			

Category Marginal Agreement: .643

Cohen's Kappa: .396

Table 312

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10   Expert 90
School 801   Grade 5
Week 9   Day 5
DHP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	14	0	4	0	1	0	0	19	,737	,947	,671
Engaged - oral	2	0	0	0	0	0	1	0	1	0,000	1,000	-,011
Engaged - covert	3	1	0	14	1	0	6	0	22	,636	,955	,526
Not engaged - interim	4	1	1	0	6	0	0	0	8	,750	1,000	,726
Not engaged - waiting	5	0	0	0	0	0	0	0	0	-----	0,000	-----
Not engaged -off task	6	2	0	3	1	0	21	0	27	,778	,900	,667
None of the above	7	0	0	0	0	0	2	11	13	,846	,846	,828
Marginal Totals		18	1	21	8	1	30	11	90			

Category Marginal Agreement: ,807

Cohen's Kappa: ,686

Table 313

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20   Expert 90
School 801   Grade 5
Week 9   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Engaged - written	1	18	0	1	0	0	0	0	19	.947	.633	.921
Engaged - oral	2	0	0	0	0	0	1	0	1	0.000	1.000	-.011
Engaged - covert	3	8	0	8	2	0	4	0	22	.364	.545	.266
Not engaged - interim	4	0	1	1	6	0	0	0	8	.750	1.000	.726
Not engaged - waiting	5	0	0	0	0	0	0	0	0	-----	0.000	-----
Not engaged -off task	6	4	0	2	0	1	20	0	27	.741	.963	.635
None of the above	7	0	0	0	0	0	1	12	13	.923	.923	.911
Marginal Totals		30	1	12	8	1	26	12	90			

Category Marginal Agreement: .724

Cohen's Kappa: .631

Table 314

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	20	1	1	0	0	0	0	22	.909	.786	.868
Engaged - oral	2	0	1	5	0	0	0	0	6	.167	.857	.096
Engaged - covert	3	7	2	18	0	3	1	0	31	.581	.806	.419
Not engaged - interim	4	0	0	0	2	0	0	0	2	1.000	.500	1.000
Not engaged - waiting	5	1	0	0	1	12	3	0	17	.706	1.000	.637
Not engaged -off task	6	0	3	1	0	1	5	0	10	.500	.900	.444
None of the above	7	0	0	0	1	1	0	0	2	0.000	0.000	0.000
Marginal Totals		28	7	25	4	17	9	0	90			

Category Marginal Agreement: .693

Cohen's Kappa: .541

Table 315

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 86
School 001 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	17	1	3	0	0	1	0	22	.773	.957	.695
Engaged - oral	2	0	2	4	0	0	0	0	6	.333	1.000	.286
Engaged - covert	3	4	1	23	2	0	1	0	31	.742	.838	.562
Not engaged - interim	4	0	0	0	2	0	0	0	2	1.000	.500	1.000
Not engaged - waiting	5	1	1	5	0	10	0	0	17	.588	.588	.537
Not engaged -off task	6	1	1	2	0	0	6	0	10	.600	.800	.561
None of the above	7	0	0	0	0	0	0	2	2	1.000	1.000	1.000
Marginal Totals		23	6	37	4	10	8	2	90			

Category Marginal Agreement: .812

Cohen's Kappa: .590

Table 316

Phase IV - IGE Evaluation Project
Dercriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10   Expert 90
School 801   Grade 2
Week 9   Day 5
MDPSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	5	2	1	0	0	1	0	9	.556	.818	.467
Engaged - oral	2	0	1	2	0	0	0	0	3	.333	.375	.241
Engaged - covert	3	2	4	18	1	0	0	0	25	.720	1.000	.549
Not engaged - interim	4	1	0	2	0	1	0	2	6	0.000	.167	-.015
Not engaged - waiting	5	2	0	1	0	1	1	0	5	.200	.600	.162
Not engaged -off task	6	1	1	1	0	1	6	0	10	.600	.800	.545
None of the above	7	0	0	0	0	0	0	8	8	1.000	.800	1.000
Marginal Totals		11	8	25	1	3	8	10	66			

Category Marginal Agreement: .6[illegible]1

Cohen's Kappa: .480

Table 317

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	8	0	0	0	1	0	0	9	.889	.643	.859
Engaged - oral	2	0	2	1	0	0	0	0	3	.667	.500	.633
Engaged - covert	3	4	4	16	1	0	0	0	25	.640	.760	.494
Not engaged - interim	4	1	0	0	3	2	0	0	6	.500	.833	.459
Not engaged - waiting	5	1	0	1	1	1	1	0	5	.200	.714	.105
Not engaged -off task	6	0	0	1	0	3	6	0	10	.600	.700	.553
None of the above	7	0	0	0	0	0	0	8	8	1.000	1.000	1.000
Marginal Totals		14	6	19	5	7	7	8	66			

Category Marginal Agreement: .736

Cohen's Kappa: .590

Table 318

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 80
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	13	0	0	0	1	0	0	14	.929	.737	.895
Engaged - oral	2	0	1	0	0	1	0	0	2	.500	.667	.474
Engaged - covert	3	5	1	10	0	6	1	0	23	.435	.522	.293
Not engaged - interim	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Not engaged - waiting	5	0	0	0	0	7	1	0	8	.875	.444	.821
Not engaged -off task	6	1	0	2	0	3	3	0	9	.333	.556	.273
None of the above	7	0	1	0	1	0	0	2	4	.500	.500	.483
Marginal Totals		19	3	12	1	18	5	2	60			

Category Marginal Agreement: .489

Cohen's Kappa: .496

Table 319

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1976

Reliability on Learner Moves
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	13	0	1	0	0	0	0	14	.929	.875	.903
Engaged - oral	2	1	0	0	0	1	0	0	2	0.000	1.000	-.034
Engaged - covert	3	0	2	21	0	0	0	0	23	.913	.885	.847
Not engaged - interim	4	0	0	0	0	0	0	0	0	-----	0.000	-----
Not engaged - waiting	5	0	0	1	0	6	1	0	8	.750	.889	.706
Not engaged -off task	6	2	0	3	1	2	1	0	9	.111	.222	.080
None of the above	7	0	0	0	2	0	0	2	4	.500	.500	.483
Marginal Totals		16	2	26	3	9	2	2	60			

Category Marginal Agreement: .624

Cohen's Kappa: .619

Table 320

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30: 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	13	0	2	0	1	0	0	16	,813	,941	,768
Engaged - oral	2	0	0	2	0	0	0	0	2	0.000	1.000	-,024
Engaged - covert	3	4	2	25	0	2	1	0	34	,735	,872	,506
Not engaged - interim	4	0	0	3	4	1	1	0	9	,444	,444	,417
Not engaged - waiting	5	0	0	3	0	1	0	0	4	,250	,667	,192
Not engaged -off task	6	0	0	4	0	1	11	0	16	,688	,813	,630
None of the above	7	0	0	0	0	0	0	3	3	1.000	1.000	1.000
Marginal Totals		17	2	39	4	6	13	3	84			

Category Marginal Agreement: ,820

Cohen's Kappa: ,562

Table 321

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 5
DHP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	14	0	1	0	1	0	0	16	.875	.696	.828
Engaged - oral	2	0	0	2	0	0	0	0	2	0.000	.500	-.012
Engaged - covert	3	9	0	21	0	1	3	0	34	.618	.853	.416
Not engaged - interim	4	0	1	1	7	0	0	0	9	.778	.778	.758
Not engaged - waiting	5	0	0	3	0	0	1	0	4	0.000	.750	-.037
Not engaged -off task	6	0	0	1	0	1	14	0	16	.875	.889	.841
None of the above	7	0	0	0	0	0	0	3	3	1.000	1.000	1.000
Marginal Totals		23	1	29	7	3	18	3	84			

Category Marginal Agreement: .781

Cohen's Kappa: .606

Table 322

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10   Expert 90
School 601   Grade 2
Week 9   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	9	0	2	0	1	1	0	13	,692	,769	,651
Engaged - oral	2	0	1	0	0	0	0	1	2	,500	,667	,481
Engaged - covert	3	0	1	17	3	0	2	1	24	,708	,800	,546
Not engaged - interim	4	1	0	2	2	0	0	1	6	,333	,857	,273
Not engaged - waiting	5	0	1	8	1	11	4	0	25	,440	,520	,337
Not engaged -off task	6	0	0	1	0	1	5	0	7	,714	,500	,657
None of the above	7	0	0	0	1	0	2	4	7	,571	1,000	,532
Marginal Totals		10	3	30	7	13	14	7	84			

Category Marginal Agreement: ,730

Cohen's Kappa: ,483

Table 323

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20   Expert 90
School 801   Grade 2
Week 9   Day 5
DHP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	6	0	4	0	2	0	1	13	.462	.538	.413
Engaged - oral	2	0	1	0	0	0	0	1	2	.500	.333	.462
Engaged - covert	3	1	4	15	1	0	2	1	24	.625	.889	.447
Not engaged - interim	4	0	0	1	4	0	0	1	6	.667	.833	.646
Not engaged - waiting	5	0	1	6	0	16	2	0	25	.640	.760	.535
Not engaged -off task	6	0	0	1	0	1	5	0	7	.714	.636	.671
None of the above	7	0	0	0	0	0	2	5	7	.714	.778	.680
Marginal Totals		7	6	27	5	19	11	9	84			

Category Marginal Agreement: .681

Cohen's Kappa: .525

Date: 06-25-79
Program: RELP95
Data File: RELD1

Table 324

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Interactions
Observer 10 Expert 90
School 801 Grade 5
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	1	0	0	0	0	0	0	0	0	0	0	1	1,000	1,000	1,000
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	2	0	0	0	0	0	0	0	5	7	,286	,571	,252
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	1	0	0	0	2	3	,333	,333	,326
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	2	0	0	0	0	1	0	0	76	79	,962	,952	,512
Marginal Totals		1	0	4	0	0	0	1	1	0	0	83	90			

Category Marginal Agreement: ,571

Cohen's Kappa: ,404

Table 325

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP93
Data File: RELD1

Reliability on Interactions
Observer 20 Expert 90
School 801 Grade 5
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	1	0	0	0	0	0	0	0	0	0	0	1	1,000	,500	1,000
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	3	0	0	0	0	0	0	0	4	7	,429	,857	,388
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	2	0	0	0	0	0	0	0	1	3	0,000	0,000	0,000
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	1	0	1	0	0	0	0	1	0	0	76	79	,962	,975	,620
Marginal Totals		2	0	6	0	0	0	0	1	0	0	81	90			

Category Marginal Agreement: ,466

Cohen's Kappa: ,457

Date: 06-25-79
Program: REL.P95
Data File: RELD1

Table 326

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Interactions
Observer 40 Expert 80
School 301 Grade 5
Week 9 Day 4
DMP

Category chosen by Expert 80	Cat. #	1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		Category chosen by Observer 10														
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	2	0	0	0	0	0	0	0	0	2	1.000	.500	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	2	0	0	1	3	0.000	.333	-.011
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	2	0	0	0	0	2	1.000	.667	1.000
Teacher to Group	8	1	0	0	0	0	0	1	8	0	0	3	13	.615	.813	.532
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	2	0	1	0	0	6	0	0	61	70	.871	.929	.537
Marginal Totals		1	0	4	0	1	0	3	16	0	0	65	90			

Category Marginal Agreement: .840

Cohen's Kappa: .540

Table 327

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	1	0	0	0	1	0.000	.333	-.048
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	1	0	0	0	1	0	0	0	0	2	.500	.500	.492
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	1	0	0	0	1	0.000	1.000	-.015
Teacher to Group	8	2	0	0	0	0	0	0	23	0	0	3	28	.821	.966	.681
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	1	1	0.000	.333	-.048
None of the above	11	1	0	0	0	0	0	0	4	0	3	24	32	.750	.906	.554
Marginal Totals		3	0	1	0	0	0	1	29	0	3	29	66			

Category Marginal Agreement: .877

Cohen's Kappa: .544

Table 328

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP99
Data File: RELD1

Reliability on Interactions
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 4
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	1	0	1	0.000	1.000	-.018
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	2	0	0	0	0	0	0	0	0	2	1.000	.400	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	1	0	0	0	1	0.000	0.000	0.000
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	1	0	0	0	1	0.000	0.000	0.000
Teacher to Group	8	1	0	1	0	0	0	0	15	0	0	11	28	.536	.714	.334
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	1	0	0	0	1	0.000	.250	-.068
None of the above	11	0	0	2	0	0	0	0	2	0	3	25	32	.781	.889	.519
Marginal Totals		1	0	5	0	0	0	0	20	0	4	36	66			

Category Marginal Agreement: .468

Cohen's Kappa: .397

Table 329

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 40   Expert 80
School 801   Grade 2
Week 9   Day 4
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	3	0	0	0	0	0	0	1	0	0	0	4	.750	.750	.737
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	1	1	0.000	1.000	-.017
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	2	0	0	1	0	0	0	3	.667	.667	.655
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	0	0	0	0	0	1	0.000	.333	-.053
Teacher to Group	8	0	0	0	0	0	0	0	7	0	0	1	8	.875	.571	.837
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	0	0	0	0	3	5	0	0	35	43	.814	.860	.515
Marginal Totals		3	0	1	0	2	0	3	14	0	0	37	60			

Category Marginal Agreement: .697

Cohen's Kappa: .584

Table 330

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: REL01

Reliability on Interactions
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Lightfu Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	1	0	0	0	1	0	0	0	3	5	,200	,600	,170
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	1	0	0	0	0	0	0	0	0	0	0	1	0,000	0,000	0,000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	1	0	0	0	2	3	,333	1,000	,309
Teacher to Group	8	0	0	0	0	0	0	0	2	0	0	0	2	1,000	1,000	1,000
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	2	0	0	0	1	0	0	0	70	73	,959	,973	,616
Marginal Totals		1	0	3	0	0	0	3	2	0	0	75	84			

Category Marginal Agreement: ,596

Cohen's Kappa: ,459

Table 331

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	4	0	0	0	0	0	0	0	1	5	.800	.833	.785
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	1	0	0	0	0	0	0	0	0	0	0	1	0.000	0.000	0.000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	3	3	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	1	0	0	1	2	.500	.500	.494
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	2	0	0	0	0	0	0	0	71	73	.973	.961	.712
Marginal Totals		1	0	6	0	0	0	0	1	0	0	76	84			

Category Marginal Agreement: .382

Cohen's Kappa: .545

Table 332

Date: 06-25-79
Program: RELP95
Data File: RELD1

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Interactions
Observer 40 Expert 80
School 801 Grade 2
Week 9 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	1	0	0	0	0	0	0	1	0	0	0	2	.500	.667	.480
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	2	0	0	0	0	0	0	0	0	2	1.000	.182	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	1	0	0	1	0	0	0	2	.500	.500	.494
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	0	0	0	0	1	2	0.000	.500	-.013
Teacher to Group	8	2	0	0	0	0	0	0	3	0	0	4	9	.333	.750	.212
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	8	0	0	0	1	7	0	0	45	61	.738	.820	.269
Marginal Totals		3	0	11	0	1	0	1	12	0	0	50	78			

Category Marginal Agreement: .570

Cohen's Kappa: .299

Table 333

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 10   Expert 90
School 801   Grade 5
Week 9   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	2	2	0,000	0,000	0,000
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
None of the above	11	1	0	0	0	0	0	0	0	0	0	85	86	,988	,966	-,046
Marginal Totals		1	0	0	0	0	0	0	0	0	0	89	90			

Category Marginal Agreement: ,193

Cohen's Kappa: -,009

Table 334

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 20 Expert 90
School 80[illegible] Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	1	0	0	0	1	2	.500	.500	.494
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	1	1	0.000	0.000	0.000
None of the above	11	1	0	0	0	0	0	0	0	0	0	85	86	.988	.977	.477
Marginal Totals		1	0	0	0	0	0	1	0	0	0	88	90			

Category Marginal Agreement: .295

Cohen's Kappa: .321

Table 335

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 30 Expert 80
School 801 Grade 5
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	1	0	0	1	0	0	1	3	0.000	.333	-.011
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	1	0	0	0	0	0	0	0	0	1	1.000	.125	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Teacher to Target	5	1	0	0	0	0	0	0	0	0	0	0	1	0.000	.500	-.023
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	1	0	0	0	0	0	0	0	1	0.000	0.000	0.000
Teacher to Group	8	0	0	0	1	0	0	0	6	0	0	5	12	.500	.750	.444
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	7	2	1	0	0	2	0	0	60	72	.833	.917	.375
Marginal Totals		1	0	8	4	2	0	0	9	0	0	66	90			

Category Marginal Agreement: .378

Cohen's Kappa: .359

Table 336

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELFQS
Data File: RELD1

Reliability on Interactions
Observer 40 Expert 80
School 801 Grade 5
Week 9 Day 5
DHP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	1	0	0	0	0	0	0	2	0	0	0	3	.333	.667	.318
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	1	0	0	0	0	0	0	0	0	1	1.000	.250	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	1	0	0	0	0	0	0	1	1.000	.500	1.000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	1	0	0	0	0	1	1.000	.250	1.000
Teacher to Group	8	0	0	0	0	0	0	1	7	0	0	4	12	.583	.545	.449
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	1	0	3	0	1	0	2	13	0	0	52	72	.722	.778	.265
Marginal Totals		2	0	4	0	2	0	4	22	0	0	56	90			

Category Marginal Agreement: .498

Cohen's Kappa: .359

Table 337

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		Category chosen by Observer 10														
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	1	0	0	0	0	0	0	0	2	3	.333	.429	.254
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	1	1	0.000	1.000	-.015
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	0	0	0	0	1	2	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	11	0	0	1	12	.917	.800	.892
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
None of the above	11	1	0	5	1	2	0	0	4	0	1	34	48	.708	.813	.287
Marginal Totals		1	0	7	1	2	0	0	15	0	1	39	66			

Category Marginal Agreement: .389

Cohen's Kappa: .422

Table 338

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 20 Expert 90
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	2	0	0	0	0	0	0	0	1	3	.667	.500	.633
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	0	0	0	0	1	2	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	10	0	0	2	12	.833	.857	.788
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
None of the above	11	0	0	3	0	0	0	0	4	0	1	40	48	.833	.938	.476
Marginal Totals		0	0	6	0	0	0	0	14	0	1	45	66			

Category Marginal Agreement: .382

Cohen's Kappa: .540

Table 339

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD1

Reliability on Interactions
Observer 30 Expert 80
School 801 Grade 2
Week 9 Day 5
WDRSD

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	1	1	0.000	1.000	-.017
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	2	0	0	0	0	0	0	0	0	2	1.000	.500	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	1	0	0	0	0	2	.500	1.000	.483
Teacher to Group	8	0	0	0	0	0	0	0	3	0	0	7	10	.300	.300	.263
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	1	0	1	0	0	0	1	0	0	0	42	45	.933	.900	.600
Marginal Totals		1	0	4	0	0	0	2	3	0	0	50	60			

Category Marginal Agreement: .740

Cohen's Kappa: .469

Table 340

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 40   Expert 80
School 801   Grade 2
Week 9   Day 5
WDRSD

		Category chosen by Observer 40														
Category chosen by Expert 80	Cat. #	1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	1	0	0	0	1	2	0.000	1.000	-.034
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	1	0	0	0	0	2	.500	1.000	.483
Teacher to Group	8	0	0	0	0	0	0	0	7	0	0	3	10	.700	.900	.647
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
None of the above	11	0	0	1	0	0	0	0	2	0	1	41	45	.911	.978	.619
Marginal Totals		0	0	2	0	0	0	2	9	0	1	46	60			

Category Marginal Agreement: .646

Cohen's Kappa: .539

Table 341

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 10 Expert 90
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	1	0	0	0	0	0	0	0	0	0	1	2	,500	1,000	,488
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	1	0	0	0	1	2	,500	,500	,494
Teacher to Group	8	0	0	0	0	0	0	0	3	0	0	1	4	,750	,800	,734
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
None of the above	11	1	0	1	0	0	0	0	2	0	1	70	75	,933	,987	,440
Marginal Totals		2	0	1	0	0	0	1	5	0	1	74	84			

Category Marginal Agreement: ,470

Cohen's Kappa: ,489

Table 342

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD1

Reliability on Interactions
Observer 20   Expert 90
School 801   Grade 2
Week 9   Day 5
DMP

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	1	0	0	0	0	0	0	0	0	0	1	2	,500	,667	,481
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	0,000	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	0	0	0	0	1	2	0,000	,500	-,012
Teacher to Group	8	0	0	0	0	0	0	0	3	0	0	1	4	,750	,750	,741
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	2	0	1	0	1	0	1	0	0	0	70	75	,933	,987	,440
Marginal Totals		3	0	2	0	1	0	1	3	0	0	74	84			

Category Marginal Agreement: ,415

Cohen's Kappa: ,435

Table 343

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELPSS
Data File: RELD1

Reliability on Interactions
Observer 30 Expert 80
School 801 Grade 2
Week 9 Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	1	0	0	0	0	0	0	1	0.000	0.000	0.000
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	2	2	0.000	.500	-.050
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	2	1	0	0	0	0	0	0	1	4	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	5	0	0	4	9	.556	1.000	.502
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	2	1	2	0	0	4	0	0	59	68	.868	.971	.382
Marginal Totals		0	0	4	2	3	0	0	9	0	0	66	84			

Category Marginal Agreement: .353

Cohen's Kappa: .322

Table 344

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP98
Data File: RELD1

Reliability on Interactions
Observer 40   Expert 80
School 801   Grade 2
Week 9   Day 5
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	1	0	0	0	0	0	0	1	0.000	0.000	0.000
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	1	0	0	0	1	2	0.000	1.000	-.024
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	2	0	0	0	2	4	.500	.750	.481
Teacher to Group	8	0	0	0	0	0	0	0	5	0	0	4	9	.556	1.000	.502
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
None of the above	11	0	0	2	0	0	0	0	4	0	1	61	68	.897	1.000	.460
Marginal Totals		0	0	2	0	1	0	3	9	0	1	68	84			

Category Marginal Agreement: .536

Cohen's Kappa: .424

APPENDIX C

Contingency Tables for each Set of Observation Categories for Pairs of Observers for the On-site visits to the WDRSD and DMP Schools

Appendix C

Included in this appendix are:

Tables 345 - 350	Observer 10	School 452	Grade 2	Week 5	Day 3
Tables 351 - 356	Observer 10	School 452	Grade 5	Week 5	Day 3
Tables 357 - 364	Observer 10	School 452	Grade 2	Week 15	Day 5
Tables 365 - 370	Observer 20	School 504	Grade 2	Week 4	Day 1
Tables 371 - 378	Observer 20	School 504	Grade 2	Week 15	Day 2
Tables 379 - 387	Observer 20	School 504	Grade 5	Week 15	Day 2
Tables 388 - 393	Observer 30	School 433	Grade 2	Week 4	Day 4
Tables 394 - 402	Observer 30	School 433	Grade 5	Week 16	Day 2
Tables 403 - 410	Observer 40	School 440	Grade 5	Week 4	Day 4

Table 345

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 452 Grade 2
Week 5 Day 3
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	13	0	0	0	0	0	13	1.000	.929	1.000
Management	3	0	0	1	0	0	0	0	1	1.000	.333	1.000
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	4	0	4	1.000	1.000	1.000
None of the Above	7	0	1	2	0	0	0	51	54	.944	.944	.810
Marginal Totals		0	14	3	0	0	4	51	72			

Category Marginal Agreement: .802

Cohen's Kappa .903

Table 346

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10 Expert 90
School 452 Grade 2
Week 5 Day 3
WDRSD

		Category chosen by Observer 10						
Category chosen by Expert 90	Cat. #	1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	4	1	1	6	.667	.857	.631
Other	2	3	26	2	31	.839	.871	.742
Neither	3	0	0	35	35	1.000	.921	1.000
Marginal Totals		7	27	38	72			

Category Marginal Agreement: .883

Cohen's Kappa: .831

Table 347

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10   Expert 90
School 452   Grade 2
Week 5   Day 3
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	4	0	0	1	1	6	.667	1.000	.636
Pair	2	0	1	0	1	0	2	.500	.500	.493
Small Group (3-8)	3	1	0	0	0	0	1	0.000	0.000	0.000
Large Group (>8)	4	1	0	0	25	2	28	.893	.964	.829
None of the above	5	0	0	0	0	35	35	1.000	.921	1.000
Marginal Totals		6	1	0	27	38	72			

Category Marginal Agreement: .677

Cohen's Kappa: .835

Table 348

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10 Expert 90
School 452 Grade 2
Week 5 Day 3
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	6	3	1	10	.600	.600	.564
Not used	2	0	25	2	27	.926	.964	.879
Other	3	0	0	35	35	1.000	.921	1.000
Marginal Totals		6	28	38	72			

Category Marginal Agreement: .828

Cohen's Kappa: .858

Table 349

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10 Expert 90
School 452 Grade 2
Week 5 Day 3
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	1	0	2	2	0	0	1	6	.167	.167	.155
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	0.000	-----
Engaged - covert	3	0	1	14	0	0	0	1	16	.875	.889	.833
Not engaged - interim	4	0	0	0	3	0	0	0	3	1.000	.500	1.000
Not engaged - waiting	5	0	1	1	1	0	1	1	5	0.000	0.000	0.000
Not engaged -off task	6	0	0	1	0	0	6	0	7	.857	1.000	.842
None of the above	7	0	0	0	0	0	0	35	35	1.000	.921	1.000
Marginal Totals		1	2	18	6	0	7	38	72			

Category Marginal Agreement: .497

Cohen's Kappa: .732

Table 350

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD3

Reliability on Interactions
Observer 10 Expert 90
School 452 Grade 2
Week 5 Day 3
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	1	0	0	0	1	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	5	0	0	2	7	.714	.857	.688
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	4	1	5	.800	.800	.788
None of the above	11	1	0	1	0	0	0	0	0	0	0	57	59	.966	.983	.797
Marginal Totals		1	0	1	0	0	0	0	6	0	4	60	72			

Category Marginal Agreement: .440

Cohen's Kappa: .727

Table 351

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 452 Grade 5
Week 5 Day 3
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	2	0	0	0	0	0	0	2	1.000	1.000	1.000
Transition	2	0	1	0	0	0	0	0	1	1.000	1.000	1.000
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	1	1	0.000	0.000	0.000
None of the Above	7	0	0	0	0	0	0	62	62	1.000	.984	1.000
Marginal Totals		2	1	0	0	0	0	63	66			

Category Marginal Agreement: .746

Cohen's Kappa: .852

Table 352

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10 Expert 90
School 452 Grade 5
Week 5 Day 3
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	8	6	0	14	.571	1.000	.456
Other	2	5	43	0	48	.896	.980	.596
Neither	3	1	0	3	4	.750	.750	.738
Marginal Totals		14	49	3	66			

Category Marginal Agreement: .910

Cohen's Kappa: .559

Table 353

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10   Expert 90
School 452   Grade 5
Week 5   Day 3
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	8	0	0	2	0	10	.800	.769	.751
Pair	2	0	0	0	0	0	0	-----	0.000	----
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	----
Large Group (>8)	4	4	1	0	47	0	52	.904	.942	.627
None of the above	5	1	0	0	0	3	4	.750	.750	.738
Marginal Totals		13	1	0	49	3	66			

Category Marginal Agreement: .615

Cohen's Kappa: .683

Table 354

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 10   Expert 90
School 452   Grade 5
Week 5   Day 3
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	47	0	0	47	1.000	.959	1.000
Not used	2	1	14	0	15	.933	.933	.915
Other	3	1	0	3	4	.750	.750	.738
Marginal Totals		49	14	3	66			

Category Marginal Agreement: .881

Cohen's Kappa: .928

Table 355

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10 Expert 90
School 452 Grade 5
Week 5 Day 3
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	4	0	3	0	1	2	0	10	.400	.400	.361
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	-----	-----
Engaged - covert	3	0	0	17	0	0	2	0	19	.895	.543	.776
Not engaged - interim	4	0	0	1	1	1	0	0	3	.333	1.000	.302
Not engaged - waiting	5	0	0	13	2	5	1	0	21	.238	.476	.102
Not engaged -off task	6	0	0	1	0	2	6	0	9	.667	.818	.600
None of the above	7	0	0	0	0	1	0	3	4	.750	.750	.738
Marginal Totals		4	0	35	3	10	11	3	66			

Category Marginal Agreement: .665

Cohen's Kappa: .404

Table 356

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD3

Reliability on Interactions
Observer 10   Expert 90
School 452   Grade 5
Week 5   Day 3
WDRSD

Category chosen by Expert 90	Cat. #	1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		Category chosen by Observer 10														
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	1	1	0,000	0,000	0,000
Teacher to Group	8	0	0	0	0	0	0	0	10	0	4	15	29	,345	,379	,214
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	3	1	4	,750	,444	,711
None of the above	11	0	0	0	0	0	0	0	1	0	2	28	31	,903	,674	,681
Marginal Totals		0	0	0	0	0	0	0	11	0	9	46	66			

Category Marginal Agreement: ,300

Cohen's Kappa: ,359

Table 357

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 10 Expert 90
School 452 Grade 2
Week 15 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	2	0	0	0	0	0	0	2	1.000	.667	1.000
Transition	2	0	7	0	0	0	0	0	7	1.000	1.000	1.000
Management	3	1	0	2	0	0	0	0	3	.667	.667	.657
Break	4	0	0	0	3	0	0	0	3	1.000	1.000	1.000
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	12	0	12	1.000	1.000	1.000
None of the Above	7	0	0	0	0	0	0	45	45	1.000	1.000	1.000
Marginal Totals		3	7	2	3	0	12	45	72			

Category Marginal Agreement: .889

Cohen's Kappa: .976

Table 258

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 10 Expert 90
School 452 Grade 2
Week 15 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	13	1	0	14	.929	.875	.908
Other	2	3	28	0	31	.903	.935	.838
Neither	3	0	0	27	27	1.000	1.000	1.000
Marginal Totals		16	29	27	72			

Category Marginal Agreement: .937

Cohen's Kappa: .914

Table 359

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 10 Expert 90
School 452 Grade 2
Week 15 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	7	0	1	0	0	8	.875	.615	.847
Pair	2	5	5	0	0	0	10	.500	.900	.429
Small Group (3-8)	3	1	4	1	0	0	6	.167	.500	.130
Large Group (>8)	4	0	0	1	20	0	21	.952	.952	.934
None of the above	5	0	0	0	0	27	27	1.000	1.000	1.000
Marginal Totals		13	9	3	20	27	72			

Category Marginal Agreement: .794

Cohen's Kappa: .774

Table 360

```
                    Phase IV - IGE Evaluation Project
                     Descriptive Study - Spring 1978

                         Reliability on Materials
                        Observer 10    Expert 90
                         School 452    Grade 2
                            Week 15    Day 5
                                  WDRSD


                         Material: Paper/pencil


                          Category chosen
                          by Observer 10                                               Light's
Category chosen      Cat.                      Marginal   Nominal     Marginal     Extension
 by Expert 90          #     1     2     3       Totals   Agreement   Agreement    of Kappa

                       +++++++++++++++++++++++++++++
                       +                     +       +
     Used            1 +    23     1     0   +   24  +     .958        .958          .939
                       +                     +       +
     Not used        2 +     0    21     0   +   21  +    1.000        .955         1.000
                       +                     +       +
     Other           3 +     0     0    27   +   27  +    1.000       1.000         1.000
                       +                     +       +
                       +++++++++++++++++++++++++++++
                       +                     +       +
        Marginal Totals +   23    22    27   +   72  +
                       +                     +       +
                       +++++++++++++++++++++++++++++


                     Category Marginal Agreement: .971

                          Cohen's Kappa: .979
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Table 361

```
                        Phase IV - ICE Evaluation Project
                        Descriptive Study - Spring 1978

                             Reliability on Materials
                             Observer 10   Expert 90
                              School 452   Grade 2
                                 Week 15   Day 5
                                        WDRSD


                           Material: Printed material


                          Category chosen
                          by Observer 10                                                 Light's
Category chosen      Cat.                         Marginal    Nominal     Marginal      Extension
 by Expert 90         #       1     2     3       Totals     Agreement   Agreement      of Kappa

                        ++++++++++++++++++++++++++++
                        +                     +      +
     Used             1 +     0     2     0   +   2  +     0.000        0.000          0.000
                        +                     +      +
     Not used         2 +     0    43     0   +  43  +     1.000         .956          1.000
                        +                     +      +
     Other            3 +     0     0    27   +  27  +     1.000        1.000          1.000
                        +                     +      +
                        ++++++++++++++++++++++++++++
                        +                     +      +
         Marginal Totals +    0    45    27   +  72  +
                        +                     +      +
                        ++++++++++++++++++++++++++++


                        Category Marginal Agreement:  .652

                              Cohen's Kappa:  .943
```

Table 362

```
                        Phase IV - IGE Evaluation Project
                        Descriptive Study - Spring 1978

                            Reliability on Materials
                            Observer 10   Expert 90
                             School 452   Grade 2
                                Week 15   Day 5
                                     WDRSD


                            Material: Can't Tell


                           Category chosen
                           by Observer 10                                              Light's
Category chosen       Cat.                         Marginal   Nominal    Marginal    Extension
by Expert 90           #     1     2     3         Totals    Agreement   Agreement   of Kappa

                        ++++++++++++++++++++++++++++
                        +                    +        +
   Used               1 +    0     1     0   +    1   +     0.000       0.000       0.000
                        +                    +        +
   Not used           2 +    0    44     0   +   44   +     1.000        .978       1.000
                        +                    +        +
   Other              3 +    0     0    27   +   27   +     1.000       1.000       1.000
                        +                    +        +
                        ++++++++++++++++++++++++++++
                        +                    +        +
     Marginal Totals    +    0    45    27   +   72   +
                        +                    +        +
                        ++++++++++++++++++++++++++++


                     Category Marginal Agreement:  .659

                             Cohen's Kappa:  .971
```

Table 363

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 10 Expert 90
School 452 Grade 2
Week 15 Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	5	1	2	0	0	0	0	8	.625	.875	.585
Engaged - oral	2	0	2	1	0	0	0	0	3	.667	1.000	.652
Engaged - covert	3	1	0	19	0	0	4	0	24	.792	.958	.694
Not engaged - interim	4	0	0	0	2	0	0	0	2	1.000	1.000	1.000
Not engaged - waiting	5	1	0	1	0	2	1	0	5	.400	.400	.383
Not engaged -off task	6	0	0	0	0	0	3	0	3	1.000	.375	1.000
None of the above	7	0	0	0	0	0	0	27	27	1.000	1.000	1.000
Marginal Totals		7	3	23	2	2	8	27	72			

Category Marginal Agreement: .801

Cohen's Kappa: .773

Table 364

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD3

Reliability on Interactions
Observer 10   Expert 90
School 452   Grade 2
Week 15   Day 5
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 10 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	1	0	0	0	0	0	0	0	1	0.000	0.000	0.000
Target to Other Adult	2	0	0	0	0	0	1	0	0	0	0	0	1	0.000	1.000	-.014
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Teacher to Target	5	0	0	0	0	1	0	0	1	0	0	0	2	.500	.500	.493
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Teacher to Group	8	0	0	0	0	0	0	0	11	0	1	2	14	.786	.875	.724
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	1	0	0	0	0	1	0	0	0	2	0.000	.500	-.014
None of the above	11	0	1	0	0	0	0	1	3	0	0	47	52	.904	.942	.699
Marginal Totals		0	1	1	1	1	1	1	16	0	1	49	72			

Category Marginal Agreement: .382

Cohen's Kappa: .611

Table 365

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 504 Grade 2
Week 4 Day 1
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	3	0	0	0	0	0	3	1.000	1.000	1.000
Management	3	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Break	4	0	0	0	4	0	0	0	4	1.000	1.000	1.000
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	46	46	1.000	.979	1.000
Marginal Totals		0	3	0	4	0	0	47	54			

Category Marginal Agreement: .745

Cohen's Kappa: .926

Table 366

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20 Expert 90
School 504 Grade 2
Week 4 Day 1
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	14	0	0	14	1.000	.737	1.000
Other	2	5	27	0	32	.844	.875	.675
Neither	3	0	1	7	8	.875	.875	.856
Marginal Totals		19	28	7	54			

Category Marginal Agreement: .829

Cohen's Kappa: .809

Table 367

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20   Expert 90
School 504   Grade 2
Week 4   Day 1
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	15	0	0	1	0	16	,938	,889	,906
Pair	2	0	0	0	0	0	0	-----	0,000	-----
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	3	1	0	26	0	30	,867	,933	,723
None of the above	5	0	0	0	1	7	8	,875	,875	,856
Marginal Totals		18	1	0	28	7	54			

Category Marginal Agreement: ,674

Cohen's Kappa: ,813

Table 368

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 504 Grade 2
Week 4 Day 1
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	29	0	0	29	1.000	.935	1.000
Not used	2	2	15	0	17	.882	.941	.833
Other	3	0	1	7	8	.875	.875	.856
Marginal Totals		31	16	7	54			

Category Marginal Agreement: .917

Cohen's Kappa: .904

Table 369

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 90
School 504 Grade 2
Week 4 Day 1
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	8	0	0	0	0	0	0	8	1.000	.800	1.000
Engaged - oral	2	0	0	1	0	0	0	0	1	0.000	1.000	-.019
Engaged - covert	3	2	0	9	0	2	0	0	13	.692	.591	.481
Not engaged - interim	4	0	0	0	0	1	0	0	1	0.000	.500	-.038
Not engaged - waiting	5	0	1	10	2	8	1	0	22	.364	.500	.201
Not engaged -off task	6	0	0	1	0	0	0	0	1	0.000	1.000	-.019
None of the above	7	0	0	1	0	0	0	7	8	.875	.875	.856
Marginal Totals		10	1	22	2	11	1	7	54			

Category Marginal Agreement: .752

Cohen's Kappa: .472

Table 370

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD3

Reliability on Interactions
Observer 20 Expert 90
School 504 Grade 2
Week 4 Day 1
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	1	0	0	0	1	0.000	0.000	0.000
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Group	8	0	0	0	0	0	0	0	2	0	0	6	8	.250	.800	.080
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	1	0	0	0	0	7	0	0	37	45	.822	.956	.127
Marginal Totals		0	0	1	0	0	0	0	10	0	0	43	54			

Category Marginal Agreement: .439

Cohen's Kappa: .101

Table 371

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 504 Grade 2
Week 15 Day 2
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	1	0	0	0	0	0	0	1	1.000	1.000	1.000
Transition	2	0	4	0	0	0	0	0	4	1.000	1.000	1.000
Management	3	0	0	5	0	0	0	0	5	1.000	1.000	1.000
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	44	44	1.000	1.000	1.000
Marginal Totals		1	4	5	0	0	0	44	54			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 372

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20 Expert 90
School 504 Grade 2
Week 15 Day 2
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	11	0	0	11	1.000	.917	1.000
Other	2	1	32	0	33	.970	.970	.926
Neither	3	0	0	10	10	1.000	1.000	1.000
Marginal Totals		12	32	10	54			

Category Marginal Agreement: .962

Cohen's Kappa: .967

Table 373

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20   Expert 90
School 504   Grade 2
Week 15   Day 2
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	9	0	0	0	0	9	1.000	.900	1.000
Pair	2	1	1	0	0	0	2	.500	1.000	.481
Small Group (3-8)	3	0	0	0	1	0	1	0.000	0.000	0.000
Large Group (>8)	4	0	1	0	31	0	32	.969	1.000	.923
None of the above	5	0	0	0	0	10	10	1.000	1.000	1.000
Marginal Totals		10	2	0	32	10	54			

Category Marginal Agreement: .780

Cohen's Kappa: .905

Table 374

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 504 Grade 2
Week 15 Day 2
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	12	0	0	12	1.000	1.000	1.000
Not used	2	0	32	0	32	1.000	1.000	1.000
Other	3	0	0	10	10	1.000	1.000	1.000
Marginal Totals		12	32	10	54			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 375

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 504 Grade 2
Week 15 Day 2
WDRSD

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	4	0	0	4	1.000	1.000	1.000
Not used	2	0	40	0	40	1.000	1.000	1.000
Other	3	0	0	10	10	1.000	1.000	1.000
Marginal Totals		4	40	10	54			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 376

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 504 Grade 2
Week 15 Day 2
WDRSD

Material: Other

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	4	0	0	4	1.000	1.000	1.000
Not used	2	0	40	0	40	1.000	1.000	1.000
Other	3	0	0	10	10	1.000	1.000	1.000
Marginal Totals		4	40	10	54			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 377

Phase IV - IDE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 90
School 504 Grade 2
Week 15 Day 2
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20							Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5	6	7				
Engaged - written	1	2	0	0	0	0	0	0	2	1.000	.667	1.000
Engaged - oral	2	0	1	1	0	0	0	0	2	.500	.500	.491
Engaged - covert	3	1	0	13	0	1	3	0	18	.722	1.000	.583
Not engaged - interim	4	0	0	2	4	0	1	0	7	.571	.571	.537
Not engaged - waiting	5	0	0	1	0	7	0	0	8	.875	.800	.847
Not engaged -off task	6	0	0	1	0	2	4	0	7	.571	.875	.497
None of the above	7	0	0	0	0	0	0	10	10	1.000	1.000	1.000
Marginal Totals		3	1	18	4	10	8	10	54			

Category Marginal Agreement: .773

Cohen's Kappa: .697

Table 378

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD3

Reliability on Interactions
Observer 20   Expert 90
School 504   Grade 2
Week 15   Day 2
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	1	0	0	0	0	0	0	0	0	1	1.000	1.000	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	1	0	0	0	1	0.000	0.000	0.000
Teacher to Target	5	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Group	8	0	0	0	0	0	0	0	10	0	0	3	13	.769	.867	.680
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	0	0	0	0	0	4	0	0	35	39	.897	.974	.654
Marginal Totals		0	0	1	0	0	0	0	15	0	0	38	54			

Category Marginal Agreement: .710

Cohen's Kappa: .681

Table 379

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 20 Expert 90
School 504 Grade 5
Week 15 Day 2
WDRSD

Category chosen by Expert 90	Cat. #	1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		Category chosen by Observer 20										
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	0	0	0	0	0	0	0	-----	-----	-----
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	22	0	0	0	22	1.000	1.000	1.000
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	116	116	1.000	1.000	1.000
Marginal Totals		0	0	0	22	0	0	116	138			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 380

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 20 Expert 90
School 504 Grade 5
Week 15 Day 2
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Self	1	88	0	0	88	1.000	.946	1.000
Other	2	5	0	0	5	0.000	0.000	0.000
Neither	3	0	0	45	45	1.000	1.000	1.000
Marginal Totals		93	0	45	138			

Category Marginal Agreement: .649

Cohen's Kappa: .922

Table 381

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 20   Expert 90
School 504   Grade 5
Week 15   Day 2
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	80	2	0	0	0	82	.976	.988	.941
Pair	2	1	9	0	0	0	10	.900	.909	.891
Small Group (3-8)	3	0	0	1	0	0	1	1.000	1.000	1.000
Large Group (>8)	4	0	0	0	0	0	0	-----	-----	-----
None of the above	5	0	0	0	0	45	45	1.000	1.000	1.000
Marginal Totals		81	11	1	0	45	138			

Category Marginal Agreement: .974

Cohen's Kappa: .960

Table 382

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20   Expert 90
School 504   Grade 5
Week 15   Day 2
WDRSD

Material: Paper/pencil

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	37	5	0	42	.881	.894	.819
Not used	2	10	41	0	51	.804	.902	.706
Other	3	0	0	45	45	1.000	1.000	1.000
Marginal Totals		47	46	45	138			

Category Marginal Agreement: .932

Cohen's Kappa: .837

Table 383

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 504 Grade 5
Week 15 Day 2
WDRSD

Material: Printed material

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	60	11	0	71	.845	.873	.719
Not used	2	2	20	0	22	.909	.710	.883
Other	3	0	0	45	45	1.000	1.000	1.000
Marginal Totals		62	31	45	138			

Category Marginal Agreement: .861

Cohen's Kappa: .850

Table 384

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20   Expert 90
School 504   Grade 5
Week 15   Day 2
WDRSD

Material: Other

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	1	0	1	0.000	0.000	0.000
Not used	2	0	92	0	92	1.000	.989	1.000
Other	3	0	0	45	45	1.000	1.000	1.000
Marginal Totals		0	93	45	138			

Category Marginal Agreement: .663

Cohen's Kappa: .984

Table 385

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 20 Expert 90
School 504 Grade 5
Week 15 Day 2
WDRSD

Material: Can't Tell

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20			Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3				
Used	1	0	1	0	1	0.000	0.000	0.000
Not used	2	0	92	0	92	1.000	.989	1.000
Other	3	0	0	45	45	1.000	1.000	1.000
Marginal Totals		0	93	45	138			

Category Marginal Agreement: .663

Cohen's Kappa: .984

Table 386

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 20 Expert 90
School 504 Grade 5
Week 15 Day 2
WDRSD

Category chosen by Expert 90	Cat. #	Category chosen by Observer 20 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	14	0	1	0	0	0	0	15	,933	,682	,921
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	0,000	-----
Engaged - covert	3	3	3	43	3	0	0	0	52	,827	,846	,746
Not engaged - interim	4	3	0	0	7	0	0	0	10	,700	,909	,674
Not engaged - waiting	5	0	0	0	0	0	0	0	0	-----	-----	-----
Not engaged -off task	6	2	0	0	1	0	13	0	16	,813	,813	,793
None of the above	7	0	0	0	0	0	0	45	45	1,000	1,000	1,000
Marginal Totals		22	3	44	11	0	13	45	138			

Category Marginal Agreement: ,708

Cohen's Kappa: ,843

Table 387

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD3

Reliability on Interactions
Observer 20 Expert 90
School 504 Grade 5
Week 15 Day 2
WDRSD

Category chosen by Expert 90	Cat. #	1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		Category chosen by Observer 20														
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	1	0	0	0	0	0	0	0	0	0	0	1	0.000	0.000	0.000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	1	0	0	0	0	0	0	0	1	2	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	1	0	0	0	0	0	0	0	134	135	.993	1.000	.659
Marginal Totals		1	0	2	0	0	0	0	0	0	0	135	138			

Category Marginal Agreement: .200

Cohen's Kappa: .326

Table 388

Phase IV - IOE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30 Expert 80
School 433 Grade 2
Week 4 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	2	0	0	0	0	0	2	1.000	.667	1.000
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	0	0	0	0	0	-----	-----	-----
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	1	0	0	0	0	51	52	.981	.981	.654
Marginal Totals		0	3	0	0	0	0	51	54			

Category Marginal Agreement: .824

Cohen's Kappa: .791

Table 389

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                      Phase IV - IGE Evaluation Project
                      Descriptive Study - Spring 1978

                          Reliability on Pace
                        Observer 30   Expert 80
                         School 433   Grade 2
                            Week  4   Day 4
                                  DMP


                    Category chosen
                    by Observer 30
                                                                              Light's
Category chosen        Cat.                     Marginal   Nominal    Marginal    Extension
 by Expert 80           #      1    2    3       Totals   Agreement  Agreement   of Kappa

                         +++++++++++++++++++++++++++++
                         +                  +        +
     Self              1 +     1    0    0  +     1  +    1.000       .043       1.000
                         +                  +        +
     Other             2 +    22   28    1  +    51  +     .549       .549        .063
                         +                  +        +
     Neither           3 +     0    0    2  +     2  +    1.000       .667       1.000
                         +                  +        +
                         +++++++++++++++++++++++++++++
                         +                  +        +
        Marginal Totals  +    23   28    3  +    54  +
                         +                  +        +
                         +++++++++++++++++++++++++++++


                         Category Marginal Agreement:  .420

                               Cohen's Kappa:  .149
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Table 390

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30 Expert 80
School 433 Grade 2
Week 4 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Individual	1	1	0	0	0	0	1	1.000	.043	1.000
Pair	2	0	0	0	0	0	0	-----	-----	-----
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	22	0	0	28	1	51	.549	.549	.063
None of the above	5	0	0	0	0	2	2	1.000	.667	1.000
Marginal Totals		23	0	0	28	3	54			

Category Marginal Agreement: .420

Cohen's Kappa: .149

Table 391

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                        Phase IV - IGE Evaluation Project
                        Descriptive Study - Spring 1978

                          Reliability on Materials
                          Observer 30    Expert 80
                           School 433    Grade 2
                             Week  4     Day 4
                                     DMP


                          Material: Paper/pencil


                         Category chosen
                         by Observer 30                                         Light's
Category chosen      Cat.                      Marginal   Nominal    Marginal   Extension
 by Expert 80         #     1     2     3       Totals   Agreement  Agreement   of Kappa

                      ++++++++++++++++++++++++++++
                      +                    +        +
    Used            1 +    51     0     1  +   52   +     .981       .981        .654
                      +                    +        +
    Not used        2 +     0     0     0  +    0   +    -----      -----       -----
                      +                    +        +
    Other           3 +     0     0     2  +    2   +    1.000       .667       1.000
                      +                    +        +
                      ++++++++++++++++++++++++++++
                      +                    +        +
        Marginal Totals +  51     0     3  +   54   +
                      +                    +        +
                      ++++++++++++++++++++++++++++


                Category Marginal Agreement:  .824

                      Cohen's Kappa:  .791
```

Table 392

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 80
School 433 Grade 2
Week 4 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	15	0	1	0	0	1	0	17	.882	.944	.824
Engaged - oral	2	0	1	1	0	0	0	0	2	.500	.500	.491
Engaged - covert	3	2	0	8	0	7	3	1	21	.381	.571	.204
Not engaged - interim	4	1	0	0	2	0	0	0	3	.667	.667	.654
Not engaged - waiting	5	0	0	2	0	6	0	0	8	.750	.615	.671
Not engaged -off task	6	0	0	0	0	0	1	0	1	1.000	.200	1.000
None of the above	7	0	0	0	0	0	0	2	2	1.000	.667	1.000
Marginal Totals		18	1	12	2	13	5	3	54			

Category Marginal Agreement: .595

Cohen's Kappa: .541

Table 393

```
                    Phase IV - IGE Evaluation Project                                Date: 06-25-79
                     Descriptive Study - Spring 1978                                 Program: RELP9S
                                                                                     Data File: RELD2
                       Reliability on Interactions
                        Observer 30    Expert 80
                         School 433    Grade 2
                            Week  4    Day 4
                                   DMP


                                Category chosen by Observer 30                                              Light's
Category chosen       Cat.                                                      Marginal  Nominal   Marginal  Extension
 by Expert 80           #     1    2    3    4    5    6    7    8    9   10   11   Totals  Agreement Agreement of Kappa

                         ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                         +                                                      +         +
Target to Teacher      1 +    0    0    0    0    0    0    0    0    0    0    0 +    0    +   -----     -----     -----
                         +                                                      +         +
Target to Other Adult  2 +    0    0    0    0    0    0    0    0    0    0    0 +    0    +   -----     -----     -----
                         +                                                      +         +
Target to Student      3 +    0    0    0    0    0    0    0    0    0    0    0 +    0    +   -----     -----     -----
                         +                                                      +         +
Target to Tchr & Grp   4 +    0    0    0    1    0    0    0    0    0    0    1 +    2    +    .500      .500      .491
                         +                                                      +         +
Teacher to Target      5 +    0    0    0    0    0    0    0    0    0    0    0 +    0    +   -----     -----     -----
                         +                                                      +         +
Other Adult to Target  6 +    0    0    0    0    0    0    0    0    0    0    0 +    0    +   -----     -----     -----
                         +                                                      +         +
Student to Target      7 +    0    0    0    0    0    0    0    0    0    0    0 +    0    +   -----     -----     -----
                         +                                                      +         +
Teacher to Group       8 +    0    0    0    0    0    0    0    5    0    0    7 +   12    +    .417      .583      .330
                         +                                                      +         +
Other Adult to Group   9 +    0    0    0    0    0    0    0    0    0    0    0 +    0    +   -----     -----     -----
                         +                                                      +         +
Student to Group      10 +    0    0    0    0    0    0    0    0    0    0    0 +    0    +   -----     -----     -----
                         +                                                      +         +
None of the above     11 +    0    0    0    0    0    0    0    2    0    0   38 +   40    +    .950      .870      .663
                         +                                                      +         +
                         ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                         +                                                      +         +
       Marginal Totals   +    0    0    0    1    0    0    0    7    0    0   46 +   54    +
                         +                                                      +         +
                         ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


                    Category Marginal Agreement:  .651

                         Cohen's Kappa:  .455
```

735

736

447

Table 394

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 30 Expert 80
School 433 Grade 5
Week 16 Day 2
DMP

ategory chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
ait	1	0	0	0	0	0	0	0	0	-----	-----	-----
ransition	2	0	2	0	0	0	0	2	4	,500	,500	,489
anagement	3	0	0	0	0	0	0	1	1	0,000	0,000	0,000
reak	4	0	0	0	0	0	0	0	0	-----	0,000	-----
onacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
ther Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
one of the Above	7	0	0	0	1	0	0	90	91	,989	,978	,648
Marginal Totals		0	2	0	1	0	0	93	96			

Category Marginal Agreement: ,370

Cohen's Kappa: ,488

Table 395

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Pace
Observer 30 Expert 80
School 433 Grade 5
Week 16 Day 2
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Self	1	20	1	0	21	.952	1.000	.939
Other	2	0	69	1	70	.986	.972	.943
Neither	3	1	2	2	5	.400	.600	.381
Marginal Totals		21	72	3	96			

Category Marginal Agreement: .857

Cohen's Kappa: .871

Table 396

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 30 Expert 80
School 433 Grade 5
Week 16 Day 2
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	19	0	0	0	0	19	1.000	.905	1.000
Pair	2	1	1	0	0	0	2	.500	.500	.495
Small Group (3-8)	3	0	0	1	0	1	2	.500	1.000	.489
Large Group (>8)	4	0	0	0	68	0	68	1.000	.986	1.000
None of the above	5	1	0	1	1	2	5	.400	.600	.381
Marginal Totals		21	1	2	69	3	96			

Category Marginal Agreement: .798

Cohen's Kappa: .883

Table 397

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 433 Grade 5
Week 16 Day 2
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	40	1	0	41	.976	1.000	.957
Not used	2	0	49	1	50	.980	.962	.956
Other	3	1	2	2	5	.400	.600	.381
Marginal Totals		41	52	3	96			

Category Marginal Agreement: .854

Cohen's Kappa: .902

Table 398

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 433 Grade 5
Week 16 Day 2
DMP

Material: Game

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	2	0	0	2	1.000	.667	1.000
Not used	2	0	88	1	89	.989	.989	.820
Other	3	1	2	2	5	.400	.600	.381
Marginal Totals		3	90	3	96			

Category Marginal Agreement: .752

Cohen's Kappa: .676

Table 399

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 433 Grade 5
Week 16 Day 2
DMP

Material: Audio/visual aid

		Category chosen by Observer 30						
Category chosen by Expert 80	Cat. #	1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	1	0	1	0.000	0.000	0.000
Not used	2	0	89	1	90	.989	.968	.644
Other	3	0	3	2	5	.400	.600	.381
Marginal Totals		0	93	3	96			

Category Marginal Agreement: .523

Cohen's Kappa: .422

Table 400

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 30 Expert 80
School 433 Grade 5
Week 16 Day 2
DMP

Material: Other

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	0	0	0	0	-----	0.000	-----
Not used	2	1	89	1	91	.978	.989	.473
Other	3	0	3	2	5	.400	.600	.381
Marginal Totals		1	92	3	96			

Category Marginal Agreement: .530

Cohen's Kappa: .421

Table 401

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 30 Expert 80
School 433 Grade 5
Week 16 Day 2
DHP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	11	0	1	0	0	0	0	12	.917	.750	.900
Envaged - oral	2	0	1	0	0	0	0	0	1	1.000	.250	1.000
Engaged - covert	3	4	1	37	0	2	2	1	47	.787	.936	.607
Not engaged - interim	4	0	1	1	3	0	0	0	5	.600	1.000	.578
Not engaged - waiting	5	0	0	4	0	14	0	0	18	.778	1.000	.726
Not engaged -off task	6	1	1	1	0	1	4	0	8	.500	.750	.467
None of the above	7	0	0	0	2	1	0	2	5	.400	.600	.381
Marginal Totals		16	4	44	5	18	6	3	96			

Category Marginal Agreement: .758

Cohen's Kappa: .648

Table 402

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP9S
Data File: RELD2

Reliability on Interactions
Observer 30   Expert 80
School 433   Grade 5
Week 16   Day 2
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 30 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Target to Student	3	0	0	2	0	0	0	0	0	0	0	0	2	1.000	.400	1.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Teacher to Target	5	0	0	0	1	0	0	0	0	0	0	0	1	0.000	0.000	0.000
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Group	8	0	0	0	0	0	0	0	18	0	0	9	27	.667	.815	.568
Other Adult to Group	9	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	3	0	0	0	0	4	0	0	59	66	.894	.971	.636
Marginal Totals		0	0	5	1	0	0	0	22	0	0	68	96			

Category Marginal Agreement: .437

Cohen's Kappa: .604

Table 403

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on General Content
Observer 40   Expert 80
School 440   Grade 5
Week 4   Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Wait	1	0	0	0	0	0	0	0	0	-----	-----	-----
Transition	2	0	8	0	0	0	0	0	8	1.000	1.000	1.000
Management	3	0	0	0	0	0	0	0	0	-----	-----	-----
Break	4	0	0	0	1	0	0	0	1	1.000	1.000	1.000
Nonacademic	5	0	0	0	0	0	0	0	0	-----	-----	-----
Other Academic	6	0	0	0	0	0	0	0	0	-----	-----	-----
None of the Above	7	0	0	0	0	0	0	87	87	1.000	1.000	1.000
Marginal Totals		0	8	0	1	0	0	87	96			

Category Marginal Agreement: 1.000

Cohen's Kappa: 1.000

Table 404

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                          Phase IV - IGE Evaluation Project
                           Descriptive Study - Spring 1978

                                Reliability on Pace
                              Observer 40   Expert 80
                               School 440   Grade 5
                                 Week  4    Day 4
                                          DMP


                         Category chosen
                         by Observer 40                                                   Light's
Category chosen       Cat.                             Marginal   Nominal     Marginal   Extension
 by Expert 80          #     1      2      3           Totals   Agreement   Agreement   of Kappa

                        +++++++++++++++++++++++++++++
                        +                      +        +
     Self             1 +   76      1      0   +   77   +      .987        .987        .938
                        +                      +        +
     Other            2 +    0     10      0   +   10   +     1.000        .909       1.000
                        +                      +        +
     Neither          3 +    0      0      9   +    9   +     1.000       1.000       1.000
                        +                      +        +
                        +++++++++++++++++++++++++++++
                        +                      +        +
        Marginal Totals +   76     11      9   +   96   +
                        +                      +        +
                        +++++++++++++++++++++++++++++


                        Category Marginal Agreement:  .965

                               Cohen's Kappa:  .970
```

Table 405

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Grouping
Observer 40 Expert 80
School 440 Grade 5
Week 4 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40					Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
		1	2	3	4	5				
Individual	1	76	0	0	1	0	77	.987	.987	.938
Pair	2	0	0	0	0	0	0	-----	-----	-----
Small Group (3-8)	3	0	0	0	0	0	0	-----	-----	-----
Large Group (>8)	4	0	0	0	10	0	10	1.000	.909	1.000
None of the above	5	0	0	0	0	9	9	1.000	1.000	1.000
Marginal Totals		76	0	0	11	9	96			

Category Marginal Agreement: .945

Cohen's Kappa: .970

Table 406

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 440 Grade 5
Week 4 Day 4
DMP

Material: Paper/pencil

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	71	2	0	73	.973	.948	.862
Not used	2	6	8	0	14	.571	.714	.522
Other	3	0	0	9	9	1.000	1.000	1.000
Marginal Totals		77	10	9	96			

Category Marginal Agreement: .887

Cohen's Kappa: .772

Table 407

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Materials
Observer 40 Expert 80
School 440 Grade 5
Week 4 Day 4
DMP

Material: Printed material

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Used	1	17	0	0	17	1.000	.944	1.000
Not used	2	1	69	0	70	.986	.986	.949
Other	3	0	0	9	9	1.000	1.000	1.000
Marginal Totals		18	69	9	96			

Category Marginal Agreement: .977

Cohen's Kappa: .976

Table 408

```
                         Phase IV - IGE Evaluation Project
                         Descriptive Study - Spring 1978

                             Reliability on Materials
                             Observer 40   Expert 80
                              School 440   Grade 5
                                Week  4    Day 4
                                       DMP


                                 Material: Other


                        Category chosen
                        by Observer 40                                               Light's
Category chosen      Cat.                          Marginal    Nominal     Marginal    Extension
 by Expert 80          #      1     2     3        Totals     Agreement   Agreement    of Kappa

                         ++++++++++++++++++++++++++++
                         +                 +        +
     Used              1 +    1     0     0   +     1   +     1.000       1.000        1.000
                         +                 +        +
     Not used          2 +    0    86     0   +    86   +     1.000       1.000        1.000
                         +                 +        +
     Other             3 +    0     0     9   +     9   +     1.000       1.000        1.000
                         +                 +        +
                         ++++++++++++++++++++++++++++
                         +                 +        +
        Marginal Totals  +    1    86     9   +    96   +
                         +                 +        +
                         ++++++++++++++++++++++++++++


                       Category Marginal Agreement: 1.000

                              Cohen's Kappa: 1.000
```

Table 409

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Reliability on Learner Moves
Observer 40 Expert 80
School 440 Grade 5
Week 4 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40 1	2	3	4	5	6	7	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Engaged - written	1	32	1	0	0	1	0	0	34	.941	.791	.893
Engaged - oral	2	0	0	0	0	0	0	0	0	-----	0.000	-----
Engaged - covert	3	8	1	10	3	2	2	0	26	.385	.385	.313
Not engaged - interim	4	0	0	0	1	1	0	0	2	.500	.500	.478
Not engaged - waiting	5	0	0	0	0	6	0	0	6	1.000	.462	1.000
Not engaged -off task	6	3	0	0	0	3	13	0	19	.684	.789	.626
None of the above	7	0	0	0	0	0	0	9	9	1.000	1.000	1.000
Marginal Totals		43	2	10	4	13	15	9	96			

Category Marginal Agreement: .561

Cohen's Kappa: .659

Table 410

Phase IV - IGE Evaluation Project
Descriptive Study - Spring 1978

Date: 06-25-79
Program: RELP95
Data File: RELD2

Reliability on Interactions
Observer 40 Expert 80
School 440 Grade 5
Week 4 Day 4
DMP

Category chosen by Expert 80	Cat. #	Category chosen by Observer 40: 1	2	3	4	5	6	7	8	9	10	11	Marginal Totals	Nominal Agreement	Marginal Agreement	Light's Extension of Kappa
Target to Teacher	1	0	0	0	0	0	0	0	0	0	0	0	0	-----	0.000	-----
Target to Other Adult	2	0	0	0	0	0	0	0	0	1	0	0	1	0.000	1.000	-.011
Target to Student	3	0	0	0	0	0	0	0	0	0	0	2	2	0.000	0.000	0.000
Target to Tchr & Grp	4	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Teacher to Target	5	1	0	0	0	3	0	0	0	0	0	0	4	.750	.750	.742
Other Adult to Target	6	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Student to Target	7	0	0	0	0	0	0	0	0	0	0	1	1	0.000	0.000	0.000
Teacher to Group	8	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
Other Adult to Group	9	0	1	0	0	0	0	0	0	2	0	1	4	.500	.750	.484
Student to Group	10	0	0	0	0	0	0	0	0	0	0	0	0	-----	-----	-----
None of the above	11	0	0	0	0	0	0	0	0	0	0	84	84	1.000	.955	1.000
Marginal Totals		1	1	0	0	3	0	0	0	3	0	88	96			

Category Marginal Agreement: .494

Cohen's Kappa: .626

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Wayne Otto
Center Co-Directors

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Area Chairperson
Studies in Language:
Reading and Communication

Marvin J. Fruth
Area Chairperson
Studies in Implementation
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Organization for Instruction

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